

Non-State Conflicts, Weak State Capacity and Regime Change

Hanna Bugge



*Department of Political Science
Faculty of Social Sciences
University of Oslo
Spring/May 2014*

Non-state Conflicts, Weak State Capacity and Regime Change

Hanna Bugge

©Hanna Bugge

2014

Non-State Conflicts, Weak State Capacity and Regime Change

Hanna Bugge

<http://www.duo.uio.no/>

Trykk: Kopisten, Oslo

Abstract

How does regime change affect non-state conflicts? Within the broader literature coup d'états, riots and armed conflict is linked transitions between regimes. For non-state conflicts there is a lack of systemic inquire about this topic. To investigate this topic I start by examining how states internal conditions put the contexts where violence becomes more or less likely. I argue that states with non-representative institutions and low state capacity put forth conditions where non-state conflicts are likely to erupt. Further, I investigate how regime change alters this institutional set up. The interplay of a state occupied reorganizing and the potential of a different future provide motivation and opportunity for actors dissatisfied with their current situation. If groups fail to display their importance and leverage in the transition period, stakes might be lost when the emerging regime enters office and politics start to consolidate.

Using data on non-state conflicts from 1989-2008, I apply a negative binomial regression to test the effect of institutional set up and regime change on non-state conflicts. My analyses suggest a relationship between weak state capacity and non-state conflicts. Depending on choice of indicators, and the sample exposed, representative institutions might be an explanation of non-state conflicts. While I fail to find a general relationship between non-state conflicts and regime change, I find a strong relationship when allowing the indicator of regime change to include cases of state collapse. Year to year changes between political regimes cannot explain non-state conflicts, but long periods without a governing body does.

Acknowledgements

First I want to thank my two supervisors, Håvard Strand and Håvard Hegre. Your advices and guidance have been invaluable for me in this process. I also want to thank the Peace Research Institute in Oslo (PRIO) and Håvard Hegre for offering me a student scholarship and the opportunity to be part of the project: *Reassessing the Role of Democracy: Political Institutions and Armed Conflict*.¹ The opportunity to participate and be part of the intellectual and interdisciplinary environment at PRIO, have been highly stimulating. This friendly atmosphere has also made it an enjoyable process.

A special thanks goes to all those attending my presentation at PRIO i March. Your comments have been a valuable asset when writing this thesis. In addition I want to thank Jonas Nordkvelle for offering unconditional support with statics and programming, and to Ida Rudolfsen for writing an inspiring thesis.

For the girls sitting in the attic at PRIO: Ragnhild Belbo, Stine Bergersen and Lina Elter: thank you for making this spring a joyful experience.

To my fellows at Blindern, these two years would have been terribly boring without you. To Erling Hess Johnsen, Torkil Dyb Remøy, Ola Vassli and Aleksander Eilertsen: takk for kaffen!

All remaining errors are my own.

¹RNC project 217995, <http://www.prio.org/Projects/Project/?x=972>

Contents

1	Introduction	1
1.1	Introduction and Research Questions	1
1.2	Main findings	4
1.3	Definitions	5
1.4	Organization	9
2	Literature Review	11
2.1	Grievance Based Explanations	12
2.2	Political Entrepreneurs and the Manipulation of Conflicts	16
2.3	Opportunity Based Explanations	17
2.4	Summary and Remaining Research Gaps	19
3	Theoretical Framework	21
3.1	Representative Institutions: Incentives to Reduce Tension and Solve Conflicts	23
3.2	State Capacity: Capacity to Govern and Provide Order	25
3.2.1	State Capacity	25
3.2.2	Bureaucratic and Administrative State Capacity	27
3.3	Regime Change: Motivation and Opportunity for Conflicts	29
3.3.1	Regime Change per se	29
3.3.2	Direction of Regime Change	31
3.3.3	The Mediating Effect of Regime Change by Bureaucratic and Admin- istrative State Capacity	33
3.4	Summary	34
4	Research Design	35
4.1	Justification of a Quantitative Approach	35
4.2	Statistical Model and Dependent Variable	36
4.2.1	Count Model: the Negative Binomial Regression Model	38

4.3	Operationalization	40
4.3.1	Unit of analysis	41
4.3.2	Dependent Variable: Occurrence of Non-State Conflict	41
4.3.3	State Capacity	50
4.3.4	Representative Political Institutions	53
4.3.5	Regime Change	56
4.3.6	Conditional Effects	63
4.3.7	Control Variables	65
4.4	Sources of Bias and Methodological Challenges	67
4.4.1	Endogeneity	67
4.4.2	Multicollinearity	68
4.4.3	Omitted variable bias	68
4.4.4	Missing	69
4.5	Summary	70
5	Results	73
5.1	Descriptive Statistics	73
5.2	Multivariate Regression Results	78
5.2.1	Representative Institutions	80
5.2.2	Bureaucratic and Administrative State Capacity	82
5.2.3	Regime Change	83
5.2.4	Control Variables	87
5.2.5	Regime Change by Bureaucratic and Administrative State Capacity .	87
5.3	Probing the Results: Quantities of Interest	90
5.3.1	Regime Change per se: State Collapse	92
5.3.2	Direction of Change: Autocratization	94
5.3.3	Direction of Change: Democratization	97
5.4	Summary	100
6	Model Diagnostics and Robustness	103
6.1	Measure of Fit	103
6.1.1	Adequacy of the Model	104
6.1.2	Temporal and Spatial Dependency Among Observations	105
6.1.3	Influential Observations	106
6.2	Alternative Specifications and Estimation Methods	109
6.2.1	Alternative Operationalizations	109
6.2.2	Sub-Samples by Organization Level and Region	112

CONTENTS

6.2.3	Alternative Estimations	114
6.3	Summary	114
7	Conclusion	117
7.1	Findings and Non-Findings	117
7.2	Limitations and Implications	120
	Appendices	139
A	Additional Statistics	141
B	Model Robustness	147
C	Alternative Specifications	155
D	Dataset and Syntax-files	163

List of Figures

4.1	Distribution of non-state conflicts 1989-2008	39
4.2	Number of fatalities in non-state conflicts, 1989-2008	44
4.3	Authority dimension and ideal polity types, 1989-2008	56
4.4	Trends in political regimes: global average SIP score, 1989-2008,	57
4.5	Trends in regime types: frequency share, 1989-2008,	57
4.6	Decay functions of regime change, Peru	64
5.1	Trends in non-state conflicts, counts and country years, 1989-2008	74
5.2	Distribution of observations by representative institutions	76
5.3	Distribution of observations by bureaucratic quality	76
5.4	Frequency of non-state conflicts by types of representative institutions	77
5.5	Occurrences of non-state violence by bureaucratic quality, histogram of bu- reaucratic levels	79
5.6	Predicted counts over representative institutions (Model 1)	82
5.7	Predicted counts over bureaucratic quality (Model 1)	82
5.8	Predicted counts over of state collapse (Model 1)	84
5.9	Predicted counts over regime change (Model 2)	84
5.10	Predicted counts over autocratization (Model 3)	85
5.11	Predicted counts over democratization (Model 3)	85
5.12	Marginal effects (Model 3)	88
5.13	Marginal effects (Model 6)	88
5.14	Predicted counts over autocratization by bureaucratic quality (Model 6) . .	90
5.15	Predicted counts over democratization bureaucratic quality (Model 6) . . .	90
5.16	Scenario 1: State collapse for a state at high risk	93
5.17	Scenario 1: State collapse for a state at low risk	93
5.18	Scenario 2: Autocratization for a state at high risk	95
5.19	Scenario 2: Autocratization for a state at low risk	95

5.20	Scenario 3: Democratization for a state at high risk	98
5.21	Scenario 3: Democratization for a state not at low risk	98
6.1	Sensitivity analysis of states' impact on the parameter estimate of bureaucratic quality	108
A.1	Occurrences of non-state conflicts by state collapse	146
A.2	Occurrences of non-state conflicts by regime change	146
A.3	Occurrences of non-state conflicts by democratization	146
A.4	Occurrences of non-state conflicts by autocratization	146

List of Tables

4.1	Categories of non-state conflicts	46
4.2	States with most counts of non-state conflicts, 1989-2008	47
4.3	Yearly fatalities by type of organization, 1989-2008	48
4.4	Sample of non-state conflicts, 1989-2008	49
4.5	Polity Index and SIP index: sample values from Afghanistan, Somalia and Peru, 1989-2008	59
4.6	Operationalization of regime changes, sample from Peru and Afghanistan . .	62
4.7	Descriptive statistics	71
5.1	Non-state conflicts by representative institutions	75
5.2	Non-state conflicts by bureaucratic quality	78
5.3	Non-state conflicts by type of regime change	80
5.4	Results, non-state conflicts 1989-2008	81
5.5	Results conditional model, non-state conflicts 1989-2008	89
5.6	Scenario values for states with low and high risk for non-state conflicts . . .	91
A.1	Duplicated observations	141
A.2	Missing values on explanatory variables	142
A.3	States included in analysis	143
A.4	Correlation matrix - explanatory variables	144
A.5	Variance inflation factor test	145
B.1	Basemodels: poisson and negative binomial	147
B.2	Results from Model 1 with robust standard errors	148
B.3	Results from Model 2 with robust standard errors	148
B.4	Results from Model 3 with robust standard errors	149
B.5	Results from Model 4 with robust standard errors	149

B.6	Likelihood ratio tests for Mod 1 and Mod 4: Unconditional vs conditional effect of state collapse by bureaucratic quality	149
B.7	Likelihood ratio tests for Model 2 and Model 4: Uncondition vs conditional effect of state collapse by bureaucratic quality	150
B.8	Likelihood ratio tests for Model 3 and Model 6: Uncondition vs conditional effect of democratization and autocratization by bureaucratic quality	150
B.9	Likelihood ratio tests for Model 2 and Model 3: Regime change per se vs direction of change	150
B.10	Results from hurdle estimations	151
B.11	Results for unconditional analysis with removal of outliers	152
B.12	Results for conditional analysis with removal of outliers	153
C.1	Results with ACLP-index as indicator of representative institutions and regime change	156
C.2	Results with decay function of regime change, non state conflicts 1989-2008 .	157
C.3	Result from African sub-Sample	158
C.4	Result from Asian and Middle East sub-sample	159
C.5	Result from rebel sub-sample	160
C.6	Results from communal sub-sample	161
C.7	Results from estimations including civil war as control	162

Chapter 1

Introduction

1.1 Introduction and Research Questions

Why do non-state groups engage violently in some states whereas they coexist peacefully in others? By exploring how states more or less facilitate for internal violence, I find bureaucratic and administrative state capacity to be of importance. In addition I find a strong relationship between regime change and conflicts, when anarchy emerges, group engage violently.

Whereas the majority of groups in the world leave peacefully, fighting between groups is prevalent in some states. In Somalia, Afghanistan and India there have occurred a total of 77 different conflicts between groups from 1989 to 2008.¹ In Nigeria, there are more people dying in conflicts between groups than conflicts involving the government (Sundberg, Eck and Kreutz 2012). In the Indian state of Gujarat, the conflict between Hindus and Muslims led in 1992 alone to more than 1000 people killed. It also caused 98 000 people to flee their homes and leaving Gujarat's economy in a devastating condition (Watch 2002). For Afghanistan, non-state conflicts have displayed themselves as intricate patterns between groups motivated by personal grudges, blood feuds, political leverage and regional power (UCDP 2014).

For the humans and communities involved, the devastating effects are similar regardless of whether the warring parties are fighting the state or another group. In some regions of the world, non-state conflicts are more deadly than civil war. In Africa alone, more than 60 000 people lost their lives in non-state conflicts between 1989 and 2008. Despite this fact, studies of armed conflict have been state-centric in the sense that focus have been on civil wars and

¹The 77 cases cover a total of 118 conflict years. One conflict year is the occurrence of a non-state conflict on an annual basis. If two different conflicts are sustained over two years, this counts as four conflict years.

1.1. INTRODUCTION AND RESEARCH QUESTIONS

interstate wars. Little attention have been given to non-state conflicts, consequently leaving the field understudied (Sundberg, Eck and Kreutz 2012).

Contrasted to other types of collective violence, like war and civil war, the perhaps most important aspect of non-state conflicts is the lack of a government as one of the warring parties. This is merely a qualified truth which needs a bit of elaboration. Although governments are not among the warring parties in non-state conflicts, their action and policies can be seen as the direct or indirect cause of non-state conflicts (Brosche and Elfversson 2012). Grievance and inequality between groups are often rooted in government policies. I would argue that non-state conflicts cannot be investigated without been seen in relation to the state they operate within. Consequently, the state serve as the departure of my thesis as I set out to investigate how different state attributes can account for the variation we see in non-state conflicts across states.

As mentioned, there is a great variation in how often non-state conflicts occur within state. Some states never see this type of violence, whereas the phenomena seem endemic in others. What factors can explain this variation? In terms of regional share, non-state conflicts occur most frequently in African and Asian countries. The common attribute for these two regions is that states are recognized by the lack of democratic bodies as well as a limited ability to govern. These two attributes, which I more specifically address to as *non-representative institutions* and *low state capacity* constitute the institutional setup I argue is important for the variation we see in non-state violence across states. Respectively, these two attributes provide states with *incentives* and *capacity* to regulate violence. The distinction between incentives and capacity is based on the fact that the ability to act does not necessarily translate into action. However, having incentives to act is somewhat useless as action requires the capacity to execute.

I argue that representative institutions put forth incentives for states to act in a conflict reducing matter. The fear of the ballot box will sharpen leaders' incentives to act in a conflict reducing matter. Policies are more likely to be designed at benefitting the population at whole and conflicts will be approached in a neutral matter. Thus the more democratic, the less is the risk of non-state conflicts. Sudan serves as an example here, as al-Bashir's regime by no means have acted as a neutral mediator between societal groups. The regime is characterized by being one of the world's worst autocracies, perhaps being the country with the worst record of human rights violations during the last decade. The pro-government militia, the Janjaweed, share close ties with the Sudanese Government. When conflict broke out in Darfur, the Janjaweed took side with the Sudanese government whom the government supported with training and weapons. While the Janjaweed mostly have been involved in one

CHAPTER 1. INTRODUCTION

sided violence against civilians, they also have fought the Sudan Liberation Movement/Army (SLM/A) (Brosche and Elfversson 2012). While Sudan represents the outer limit of non-democratic regimes, it serves as example of how biased state could be in relation with their citizens.

As already stated, the execution of conflict reducing behaviors requires the actual capacity to do so. India is an example of state with representative institutions which also is characterized by multiple occurrences of non-state conflicts. Scholars explain this due to India's limited ability to govern (Heller 2000). Low state capacity limits state's potential to govern, making the conflict reducing effect of representative institutions depend upon state capacity. Despite good intentions, an underdeveloped bureaucracy will unable the implementation of policies decided within representative institutions (Hegre and Nygård 2014). This suggests states inhibiting the capacity to govern, can choose to use it instrumentally to implement government policies. Depending on whether institutions are representative or not, different incentives will determine the likelihood of states taking the role as neutral or biased mediators.

For non-state conflicts, states' incentives and capacity will determine how non-state groups interpret their security situation. Groups that find themselves discriminated or marginalized by state authorities will disqualify states as neutral mediators in conflicts. When groups start to question the state's incentive or capacity to protect them, groups consequently find themselves in a situation where they have to provide their own security. If state agents are not there to protect them, they must do so themselves. The consequence of this is a shift in the regulation of violence from state-based to privately based, hence increasing the risk of non-state violence. This brings the general expectation that states lacking both incentive and capacity will per se have a higher risk of experiencing non-state conflicts.

Within the broader conflict literature, the effect of political transition has identified the reorganization of state structures as a window of opportunity for actors seeking change (Mansfield and Snyder 2005; Geddes 2009; Gleditsch and Ruggeri 2010). I expect this to apply for non-state actors that seek political change. The interplay of a state occupied reorganizing and the potential of a different future provide *motivation* and *opportunity* for actors dissatisfied with their current situation. If groups fail to display their importance and leverage in the transition period, stakes might be lost when the emerging regime enters office and politics start to consolidate. This is what we see where the sudden collapse of an unpopular regime leads to a power vacuum. This power vacuum brings an increase in non-state conflicts as the political leverage depends on whether groups enable to fight off rivals or not.

For non-state actors, the reorganization of state structures affects how groups interpret their

security. Transitional periods creates situations where there exist insecurity related to *how* and *whom* will regulate violence. In the wake of a major regime change, the state's ability to regulate violence is reduced. Conflicts and issue not related to national politics, will then be pushed down the agenda (Kreutz and Eck 2011). Together, the reduced ability to govern and the insecurity caused by not knowing how the future will look like alter how groups interpret their security. The consequence for groups is that the security dilemma by no means are solved, causing groups to provide security privately. For long lasting transitional periods characterized by the complete disintegration of state structures, groups will seek private solutions to security.

While regime change per se increases the risk of non-state violence by providing an opportunity window for mobilization as well as decoration of group's security, the effect *effect* of regime change is conditioned upon state capacity. States with strong state capacity are likely to be less influenced by political changes. They are more able to govern and provide state services, even in the middle of a transition (Goodwin and Skocpol 1989; Schock 1996; DeRouen and Sobek 2004). On the regulation of violence, states with strong state capacity will maintain their ability to regulate violence, hence having fewer occurrences of non-state conflicts in transition periods.

By using newly available data on non-state conflicts I seek to investigate how state attributes like representative institutions and low state capacity affect the level of non-state violence within the wake of a regime change.

The research question guiding this thesis is:

How does regime change affect non-state violence?

1.2 Main findings

In my analysis I find support for a relationship between bureaucratic and administrative state capacity and non-state conflicts. I also find a relationship between regime change and non-state conflicts, but only in cases where the transition includes longer periods with lack of central authority.

A strong bureaucratic and administrative state capacity relates to non-state conflicts by two mechanism which jointly serve to reduce non-state conflicts. Firstly, state's ability to govern and provide services hinge upon bureaucratic and administrative capacity. It is a

CHAPTER 1. INTRODUCTION

pre-condition for governance, central to prevent disorder and restore order. Secondly, bureaucratic and administrative capacity is important determinants for groups' security. Execution of policies hinge upon bureaucratic and administrative state capacity. States seeking to prevent disorder and restore order have a better chance at fulfilling their missions when equipped with a functioning bureaucracy. It enables states to acquire information about their citizens. This is not only central for detection of rebel movements, but also to gives government information about problems and grievances within the broader population. This makes governance dependent upon bureaucratic and administrative state capacity.

For groups, bureaucratic and administrative state capacity relates to their interpretation of security. Whereas a functioning bureaucracy has the ability to provide security, if the state chooses to do so, a malfunctioning bureaucracy fails. A malfunctioning bureaucracy is defined by the lack of political independence, the temporal stop of services during changes, lack of day-to day routines and patrimonial procedures. In providing security, this type either fails or it becomes a threat to security itself. When state agents no longer constitute a trustworthy provider of security, security has to be provided from another source. Security provided by group belonging is then the most relevant source. This leads to the armament of multiple non-state actors and a shift in the regulation of violence from state-based to privately-based.

For regime change, I find support for an increase in non-state conflicts when regime includes longer periods with lack of central authority. The mechanism related to regime change is motivation and opportunity. Regime change tends to temporally (or completely) set aside the state's ability to govern. It represents a critical conjuncture for actors seeking political leverage. When states are on the verge of collapse, rebels groups have incentive to fight each other off in order to arrive as sole victors when a new government is constituted. For that not seeking government office, the mechanism leading to armament is the security dilemma.

1.3 Definitions

Many of the concepts used in this thesis are in nature both abstract and elusive. They are open to more than one interpretation. To facilitate the reading of this thesis I will start off by defining the most important concepts and how they are used in my analysis. I have chosen to exclude a definition of the explanatory variables. This allows for a focus on the concepts per se without including the explanations that alter their relationships.

These concepts are: non-state conflicts, non-state actors, states, political regimes and political

change.

Non-State Conflicts and Non-State Actors

Non-state conflicts is a sub-category of collective violence. Contrasted to other types of collective violence, like war and civil war, the most important aspect of non-state conflicts is the lack of a government as one of the warring participants. To be more precise on the type of violence I am investigating I will adopt the widely used definition by Uppsala Conflict Data Program (UCDP) throughout my thesis. UCDP defines non-state conflict to be: "*The use of armed force between two organized armed groups, neither of which is the government of a state, which results in at least 25 battle-related deaths in a year*" (Sundberg, Eck and Kreutz 2012, pg. 353).

An important aspect about this definition is the lack of criterion for incomparability. While civil wars are defined as incomparability over government power, there exists no incompatibility criterion as a prerequisite for non-state conflicts. Hence, the origins and reasons why groups fight are diverse. It should also be noted that state absence is only a qualified truth. While the definition exclude state as one the warring parties, the state and its policies can be seen as the direct or indirect cause of non-state conflicts (Brosche and Elfversson 2012).

A *non-state actor* is one of the warring parties in a non-state conflict. Non-state actors constitute a variety of groups based on different affiliations and organization levels. They could be organized on the basis of ethnicity, clan, political affiliation, religion or separatist movement.² A broad and much used separation is done by dividing the non-state conflicts into three categories based on the actors' affiliation and organization level. These three are *rebel conflicts*, *political conflicts* and *communal conflicts*. Rebel conflicts are between rebel groups, military factions and other highly organized groups. Political conflicts are between parties and candidates as well as electoral violence. Communal conflicts are between groups that mobilize themselves among communal lines like: ethnicity, clan, religion, tribe or nationality.

There are two levels of organization: formally and informally organized groups. Formally organized groups constitute any non-governmental group of people having announced a name for their group and using armed force. Rebel conflicts are between formally organized groups. An informal group is any group who does not have an announced name, but who uses armed force and whose violent activity meets at least one of the following organizational requirements: there must be a clear pattern of incidents which are connected, or there must

²A sample showing the variety is found in Section 4.3.2, Table 4.4.

CHAPTER 1. INTRODUCTION

be evidence that violence was planned in advance. Political conflicts and communal conflicts belong to this organization level.³

The State, Political Regimes and Political Change

The state is not present in the UCDP definition of non-state conflicts. Since the state constitutes an important aspect of the theoretic framework I am going to build, an initial understanding of what constitutes states is of importance.

The modern understanding of the state origins in the work of Weber ([1918]1946). Following the Weberian definition, a state has two distinct features: monopoly on the use of violence and an organization supporting it (usually some kind of bureaucracy or other centralized organization). Lacking these features, the state cannot exist. Non-state conflicts are in particular frequent in countries like Somalia, Sudan and Afghanistan. According to the Weberian definition, these countries are not states; they are stateless societies, recognized as failed states. For my framework, the Weberian state definition is not suited. I will adopt UCDP' definition of state where also failed states are included. UCDP define a state as "*either an internationally recognized sovereign government controlling a specified territory, or an internationally unrecognized government controlling a specified territory whose sovereignty is not disputed by another internationally recognized sovereign government previously controlling the same territory*" (Gleditsch, Wallensteen, Eriksson, Sollenberg and Strand 2002, pg. 619). The majority of UCDP' states fall into the Weberian definition. The difference is that cases included in UCDP's definition merely could be considered to be a territory.

In UCDP's definition, government is the actor controlling (or used to control) the state. In my thesis, governments differ by their type of political regime. They also differ by other attributes, but one important dimensions of governments is the type of political regime they origin from. There are many interpretations of what constitutes a *political regime*. The overall concept is broad and encompasses aspects like: traditions, norms, historical legacy, culture and institutional characteristics. To arrive at a more precise definition of political regimes, I will first present the broadness of the concept before I narrow it down to a definition solely based on political institutions.

As an overall phenomenon, political regimes can be understood as *a set of procedures that determine the distribution of power*. At any moment, political regimes represent the em-

³This does not exclude the potential that an group with political affiliation can be a rebel group. For instance, Hezbollah in Lebanon is based on a religious affiliation, but due to a standing army they fall into the rebel category.

bodiment of authority traditions which overtime serve to constitute the political regime. Nested within political regimes are political institutions. For political scientist, categorization of political regimes is most commonly based political institutions. By examining political institutions, political regimes are categorized along a dimension with two extreme points: autocracy and democracy. Before presenting the scholarly debate on how to categorize political regimes, it is somewhat important to understand the how institutions work per se. An influential definition is offered by North (1990). In his view, institutions are sets of constraints on behavior as they form rules and regulations. They are also a set of procedures to detect deviations from the rules and regulations. In addition, institutions include a set of moral, ethical and behavioral norms. While the definition of North is rather broad, it helps to facilitate an understanding of how political institutions both express the values and power configurations of their respective regimes.

In their categorization of political regimes, scholars disagree upon the institutions of importance and their relative leverage. For instance, Linz (1975) classifies political regimes by their degree of popular mobilization, the degree of inclusiveness and the political values expressed. Another and much employed categorization is offered by Dahl (1971). He distinguishes political regimes along by dimension: the degree of political competition and the degree of political participation. Przeworski, Alvarez, Cheibub and Limongi (2000) classify political regimes according to a set of criteria, or institutional procedures. Whether or not they fulfill the set, they define political regimes as democracies or autocracies.

In my thesis, I will adopt the definitions used by Eckstein (1973) and Gurr (1974). They suggest three dimensions of importance: regulation of executive recruitment, the extent of the franchise and the constraints on the executive powers (Gates, Hegre, Jones and Strand 2006, pg. 894). The major advantage of the categorization by Eckstein and Gurr is that political regimes are classified along a continuous scale. Depending on institutional set up, political regimes span from autocracies, by anocracies to democracies. To summarize, I define political regimes along a continuous scale spanning from autocracy to democracy. The political institutions of importance are those regulating executive recruitment, executive constraints and participation.

By defining political regimes by political institutions, the definition of political change automatically involves changes in political institutions. This means that change in political institutions affects the set of procedures that determine the distribution of power. Regime change will involve a fundamental realignment of the rules, altering the composition of players included in the process of decision making. A political transition has therefore direct consequences for political actors and citizens because it alters how power is allocated and

hence all the advantages stemming from political power.

1.4 Organization

This thesis is organized as follows: In Chapter 2 I review the prior scholarly debate of non-state conflicts. Former literature will be presented and addressees. In Chapter 3 I develop a theoretical underpin with derived hypothesis. In particular I develop expectations about why states differ to how many non-state conflicts they erupt. In Chapter 4 I develop the research design enabling me to test the hypothesis. This chapter seeks to bridge the gap between the theoretical framework and the empirical analysis. I proceed in Chapter 5 by providing bivariate statistics and results from the analysis. Discussion and interpretation of findings will also be offered. In 6 I test the robustness of my result by exposing the research design to alternative operationalizations and measure of fit. Finally, concluding remarks are offered in Chapter 7.

Chapter 2

Literature Review

Despite the fact that non state-conflicts in many regions of the world are as deadly as civil wars, far less research have been conducted on the topic. The approach has mostly been qualitative, focusing on high profile cases in countries like Kenya, India and Indonesia. Even those with a comparative ambition have confined their research to investigate variation within a country or to a restricted area (Sundberg, Eck and Kreutz 2012). The lack of cross case comparison and the tendency for scholars to investigate the same cases leads to some selection bias within the field. This makes systematic inquiry about non-state conflicts somewhat restricted. The lack of systematic inquiry is not because researchers do not engage in the topic; the reason to blame is rather the lack of cross national data. However, with the recent availability of the comprehensive UCDP non-state conflict dataset, the scholarly debate is making progress (Sundberg, Eck and Kreutz 2012).¹

This section sets out to investigate what we know about non-state conflicts. I will start off by presenting the scholarly literature on non-state conflicts. I find three strands in the literature worthy reviewing.² The first strand explains non- state conflicts by grievance between groups. Drawing on relative deprivation theory, they predict non-state conflicts when inequality leads to a distinction between the favored and the un-favored. While scholars within this approach argue from the same perspective, they differ upon the origins of grievance. Some incorpo-

¹Other notable data sets that to some extent touches upon the same issues are the Minorities at Risk data set (MAR) (Minorities at Risk Project 2009) and the Ethnic Power Relations data set (EPR) (Cederman, Min and Wimmer 2009).

²There is also a noteworthy strand using rational choice and game-theoretic model. Since game-theoretic model in a strict sense does not explain *why* conflicts happen, I have omitted them from the literature review. For those interested, works by Cunningham, Gleditsch and Salehyan (2009), Cunningham, Bakke and Seymour (2012) and Bakke, Cunningham and Seymour (2012) use game-theoretic models in their examinations of in-fighting in civil wars.

rate state and institutional structures as the potential source of grievance, whereas others do not. The second strand reviewed focus on how political entrepreneurs manipulate conflicts to entrench their own powers. Political leaders may see a utility in creating or sustaining tension if it can help them win an election or a new period in office. The last strand reviewed is the literature focusing on opportunities as a pre-condition for violent mobilization. Material resources, social resources and contextual surroundings explain the occurrence of conflicts. Consequently will the control of natural resource become a valuable asset groups have economic- and political incentives to keep for themselves. Thus, rivalry and fighting between non-state actors can explained by strive to secure material and political leverage.

2.1 Grievance Based Explanations

Since Toqueville, inequality has always been a major explanation of conflict. Unequal distributions of goods are presumed to make societies more prone to civil wars, riots, demonstrations, coups, communal conflicts and rebellions. The modern versions of Toqueville's proposition have been made famous in the work of Davies (1962) and Gurr (1970). These scholars state that grievance will be generated when there is a gap between what people have in relation to others or in relation to their expectations. When this grievance reaches a sufficient level, people will take up arms against the perceived source of grievance.

Despite the same point of departure, scholars relying on grievance based explanations disagree upon the source of grievance and its origins. In the following sections I present two notable sources of grievance between non-state actors, namely socio-economic inequality and environmental scarcity.

Socio-Economic Inequality

Within the field of conflict research, inequality stands as a solid explanation of armed conflicts. Various measures of political, social and economic inequality have been put forth by scholars seeking to explain collective violence. Despite a mixed empirical record within the quantitative field, scholars refuse to dismiss inequality as a source of conflicts.

Inequality can be grasped in different ways. It can occur randomly between individuals (vertical inequality) and it can occur between people with shared identities (horizontal inequality). Since collective mobilization is presumed to be easier when people initially share

CHAPTER 2. LITERATURE REVIEW

a social identity, scholars studying non-state conflict have been occupied with horizontal inequality. They stress situations where relative fortunes starts to differ between people with shared identities. Horizontal inequality is hypothesized to be more dangerous than vertical inequality because it involves a group aspect. If inequalities coincide with group cleavages, it induces more hostile sentiments against other groups. Compared to inequality between individuals, differing fortunes between groups automatically have an aspect more closely linked to conflict. When relative fortunes differ, group belonging reinforce the impetus for violence as well as inward cohesion facilitates violent mobilization (Tajfel and Turner 1979; Horowitz 1985; Gurr 2000; Stewart 2000; Wimmer 2002). Among the types of inequality, economic is expected to particular salient. Since a minimum of economic goods is required to stay alive, even the smallest decline becomes crucial when people live close to the subsistence level (Gurr 1970, pg. 131).

In the broader conflict literature, the empirical evidence linking inequality and civil conflict is mixed. Gaining monument in the studies of Fearon and Laitin (2003) and Collier and Hoeffler (2004), inequality induced grievance was long dismissed as a source civil conflict. The non-findings caused a huge scholarly debate and criticism were directed against the scholars' conceptualization and indicators of inequality.³ In other studies, both vertical and horizontal inequality of wealth and power proves to be significant (See eg. Alesina and Perotti 1996; Nafziger and Auvinen 2002; Østby 2008; Cederman, Weidmann and Gleditsch 2011; Buhaug, Gleditsch, Holtermann, Tollefsen and Østby 2011). Despite some inconsistency in findings, most scholars refuse to dismiss inequality as a cause of civil conflict.

Within the non-state literature, researchers find evidence linking horizontal inequality and marginalization of groups to conflicts. Closely linked to economic marginalization is poverty and economic decline. While the scholars find a general relationship between horizontal inequality in both poor and rich societies, they all stress how poverty and economic recession reinforce the risk of conflict in societies where people already live in a vulnerable situation (Mancini 2005; Murshed and Gates 2005; Tadjoeddin and Murshed 2007; Barron, Kaiser and Pradhan 2009; Cederman, Weidmann and Gleditsch 2011; Rudolfson 2013; Fjelde and Østby 2014). In the majority of these findings, economic inequality is the most robust predictor of grievance based non-state conflicts.⁴

³Scholars claim that these non-findings are mainly based on the use of highly aggregated proxies such as gross domestic product (GDP) per capita and ethnic fictionalization measure. Due to their high level of aggregation, these proxies makes it hard to distinguish one explanation from another (Sambanis 2004a; Østby 2008). See also Lichbach (1989)'s review of studies done one the link between economic inequality and political conflict.

⁴Other proxies of horizontal equability are also used, but they do not prove as robust. Examples of these are landholding, political rights, access to employment and access to public services.

Environmental Scarcity

An out-growth of the relative deprivation theory is the environmental scarcity literature. Founded in the work of Homer-Dixon (1991, 1999) and Kahl (2006), the environmental scarcity literature predicts conflict when degeneration of resources interacts with an existing condition of scarcity.⁵ In societies where people's livelihood depend on access to water points, fish stocks or cropland, a sudden shortage of these resources have a severe impact on people's lives. A sudden shortage is not a problem if there is a surplus, but when resources are scare and is demand high, degeneration becomes a vital problem. Grievance is triggered when depletion, increased demand and/or maldistribution of scare resources generates a division where some people are fortunate and others not. There are two mechanism identified on how scarcity of natural resources leads to grievance, namely: *resource capture* and *ecological marginalization*.

The first one relates to predation. Faced with the potential of famine and economic ruin, predation becomes a solution. The latter one predicts conflict when people are forced to migration into areas less suitable for habitation. Increased population pressure leads newcomers and existing inhabitants to clash over the distribution of scare goods. Population growth faces some of the same issue. With an increase in people, everyone's slice of cake decreases. In sub-Saharan African, an area characterized by its high share of people engaged in the rule sector, scholars find support for a relationship between environmental scarcity and non-state conflicts (Meier, Bond and Bond 2007; Fjelde and von Uexkull 2012). In his study of India, Urdal (2008) finds more outbreaks of violence in areas with high population growth.

A sub-branch within the environmental-scarcity literature is the research aimed at investigating the linkage between climate change and conflict. Disasters such as droughts, floods and windstorms influence food supplies. When faced with the potential of famine and poverty, climate induced migration causes people to clash over the access to scare resources like water and arable land (Homer-Dixon 1999; Reuveny 2007; Obioha 2008; Hendrix and Salehyan 2012). Kahl (2006, pp. 234-35) explains the Tuareg conflicts in northern Mali by this mechanism. These people live in the Sahel belt, an area known for its extremely harsh living conditions. Stroked by severe droughts a multiple of times, the livelihood of the Tuaregs was destroyed. Following the drought, Tuaregs migrated to Niger and Algeria. Insurgency occurred the period following the famine and the subsequent refugee crisis.

⁵Gurr (1970, pg. 131) also recognized this in his work. When people live close to the subsistence margin, almost any decline will increase the impetus for violence. Natural disaster are then particular dangerous in peasant societies when people live on the subsistence margin.

Tracing the Source of Grievance

Common for all scholars drawing on relative deprivation theory is how they concur on the finding that inequality increases the risk conflict between groups, either as unequal access to natural resources or as political and socio-economic differences. What they do not agree upon is the causal starting point of grievance. In particular, scholars that do not incorporate the institutional setting non-state conflicts erupt in, are accused for missing out on how institutional structures more or less facilitates for conflicts.

A growing number of studies argue that the role of environmental scarcity has been exaggerated. Critics note that it over-predicts conflict and disregards the role of political institutions. Instead, they argue that underlying mechanisms like state failure, political- and economical marginalization and state capacity are stronger and more robust predictors (Barnett 2001; Benjaminsen 2008; Theisen 2008; Raleigh 2010; Turner, Ayantunde, Patterson and Patterson 2011; Fjelde and Østby 2014). Based on his investigation of the Tuareg conflicts, Benjaminsen (2008) reject the environmental scarcity theory. Contradicting the findings of Kahl (2006), he argues Tuareg rebellions mainly have been due to failing state policies. On the topic of climate change, scholars contend that although climate change is an insufficient cause of conflict itself, it may aggregate current tensions and inequalities (Barnett 2000, 2001; Nordås and Gleditsch 2007; Raleigh 2010).⁶

According to Raleigh (2010), much of environmental security literature often end up with concluding that political and economic characteristics of the countries where the strongest predictors of conflict. Conflicts most often erupt within the context of a hostile and weak state. Scholars focusing on marginalization stress the importance of state institutions, argue they are fundamental for our understanding of conflicts. A hostile and biased state creates grievance induced conflicts when allocation of resources and provision of public goods leads to unequally distribution among groups (Wimmer 1997; Cederman, Wimmer and Min 2010).

To summarize, the strand of literature drawing on relative deprivation arguments all focus on how various aspects of inequality leads to grievance induced conflict between groups. When there becomes a division between the favored and the non-favored, inter- group comparison provokes group mobilization leading to a situation where conflict between groups becomes likely (Gurr 2000; Wimmer 2002; Stewart 2008b). While scholars concur on the importance

⁶The same notion is upheld within the civil literature. Scholars fail to find any systematic evidence linking drought to the onset of conflicts. Theisen, Holtermann and Buhaug (2011) fail to find a relationship between drought and civil conflict. Miguel, Satyanath and Serengeti (2004) proxy economic growth through rainfall. They find that recession, measured as drought, is related to conflict in economies relying on rain-fed agriculture.

of equal distribution of wealth and power, they disagree upon the origins of grievance. I would argue that non-state conflicts cannot be understood without incorporating the structures they operate within. Disregarding the political and institutional context groups operate within leads to narrow conclusions missing the overall picture. In this sense, many of the grievance based explanations presented here are only a manifestation of malfunction institutions and weak state capacity. This calls for a state-based examination of non-state conflicts.

2.2 Political Entrepreneurs and the Manipulation of Conflicts

A second strand of literature addressing non-state conflicts has focused on how political entrepreneurs manipulate conflicts to entrench their own power. Political leaders may see the utility in creating or sustaining tension if it can help them win an election or a new period in office.

Most of the empiric work of this approach is drawn from the Hindu-/ Muslim violence in India. Brass (1997, 2003) have in his works shown how incidences of local violence fit into broader frames of meaning, thereby becoming a tool for leaders wanting to uphold their ideology. For an actor seeking leverage, the mobilization of people is often the key to success. Leaders and politicians fighting for a cause understand, and maximize by this logic. Representing a big group means more political leverage in negotiation. In addition, a big group constitutes the potential of a big army. By appealing to various identities, leaders can increase their support base. It also means that leaders strategically can manipulate identities when lacking an actual support base.

Wilkinson (2004) explains India's regional variation in ethnic violence due to town- and state-level electoral incentives. These two factors combined predict when and where ethnic riots rise in India. They are planned by local politicians for a clear political purpose. Chances of victory at the ballot box creates incentives for local leaders to increase tension and polarization in conflicts that for most people believed to be cases of ancient ethnic grudge. Further, Wilkinson (2004) argues that state-electoral incentives decides whether the state will intervene and act as a mediator. If the fighting parties serve as an important base of their electorate, the state will intervene and try to end the conflict. If not, the state will remain as an outsider.

Among scholars, ethnical political mobilization is often viewed as a product of the strate-

gic behavior of political entrepreneurs (Horowitz 1985; Brass 1991; Mueller 2000; Wimmer 2002).⁷ Wimmer (1997, 2002) argues that politicization of ethnicity is an aspect of modern state-building. Political conflicts take an ethnic form when resources are distributed along ethnic lines. When recruiting and committing to a cause, ethnicity proves to be a powerful asset leaders can derive support from.

There is also a sub-branch within this approach focusing on how political transition becomes important junctures where mobilization have occur rapidly.⁸ A political entrepreneur facing a state occupied reorganizing, are in urgent need of mobilization. Since stakes may be lost when new leaders enters office and the regime stats to consolidate, regime changes represent critical juncture where identities are likely to politicized and mobilized (Van Klinken 2007*a*; Kreutz and Eck 2011).

The objections to the scholars explaining non-state conflicts by elite manipulation have been the lack of incorporation institutional conditions. For instance, Mueller (2000) have argued that the term "ethnic war" have been a misleading concept within in the scholarly debate. According to Mueller, the Yugoslavian- and Rwanda experience was not an "ethnic conflict", despite the fact that the fighting parties belong to distinct ethnic groups. What display itself was instead manipulating elites with a lack of constrain on their power. Wilkinson (2004) does to some extent touch upon this topic by arguing that institutional structures put forth the rule of the game which leaders mobilize by. Jointly, Mueller and Wilkinson trance the explanation of non-state conflicts beyond the political entrepreneurs themselves. Institutional structures put forth both constrains and conditions facilitating leaders' strategic use of conflicts. Once again, this calls for an examination of non-state conflicts with an incorporation of institutional structures.

2.3 Opportunity Based Explanations

The last strand of literature I will address is the opportunity based explanations. Taking a different point of view on the origins of conflict, this perspective argues that grievance and deprivation alone will not cause conflict. Scholars like Tilly (1978) and Jenkins (1983) argues that resources is the pre-condition for collective mobilization. Without them groups cannot

⁷Much scholarly debate have focused on the role of ethnicity as a determinant in the onset of civil wars. While some focus of whether the existence of ethnic groups per se causes conflict (See. eg. Ellingsen 2000; Fearon and Laitin 2003), others have focused on the political and economic marginalization of ethnic groups (Gurr 1970; Horowitz 1985; Cederman, Wimmer and Min 2010)

⁸I will address the opportunity stemming from state reorganization in subsequent sections.

mobilize for conflict, hence conflicts cannot happen.⁹

There are many interpretations and definitions of opportunity and resources. A broad definition entails material resources and non-material resources like loyalty and allegiance. Another way to grasp opportunities is how contextual surroundings represent opportunities, or conjuncture, more or less feasible for conflicts (Weinstein 2007).

The role of natural resources have been thoroughly investigated within the broader conflict literature.¹⁰ When it comes to non-state conflicts the main focus of opportunity based explanation have been addressed by looking at rebel groups within the context of civil wars. Control of natural resource becomes a valuable asset groups have economic- and political incentives to keep for themselves. Rivalry and fighting between rebel groups can explained by strive to secure material and political leverage. If future political leverage hinges on defeating both the government and a rival rebel groups, access to resources makes the goal more easily accomplished (Cunningham, Bakke and Seymour 2012; Fjelde and Nilsson 2012).

When looking at conflicts between rebel groups in civil wars, Cunningham, Bakke and Seymour (2012, pp. 572) note that rebel groups fighting each other is as common as rebel groups fighting the government. Non-state conflicts in Colombia, Sudan, and Sierra Leone are as much about government power as it is about control of resources like drugs, oil, and gemstones. Fjelde and Nilsson (2012) find the same relationship, where the presence of oil increases the risk of in-fighting. Not completely overlooked, some attention is also given to conflicts between non-state actors outside civil wars. In particular, greed-motivated explanations are offered for cases of criminal violence. One example is Mexico, where the majority of non-state conflicts have been clashes between drug cartels over stakes in the illegal drug industry (Sundberg, Eck and Kreutz 2012).

Some scholars also view political changes as an opportunity. Political transition creates opportunities for actors to mobilize and exploit the instability of state reorganization.¹¹ Fol-

⁹Resource opportunity based explanations vary with their assumption's about the motivational role of grievance in rebellion. Whereas the opportunity perspective takes grievance for granted, the greed perspective does not. Since both perspectives stress the *presence* of opportunities and resources, I will not stress the motivational aspect. Case-based evidence also suggests that there seldom are clear cut lines between cases of greed- and opportunity-motivated rebellion.

¹⁰The role of natural resources are well investigated within the broader conflict literature. Scholars link the availability of natural resources both the onset and duration of conflict (See eg. de Soysa 2000, 2002; Collier and Hoeffler 2004; Ross 2004*a,b*). Looking more directly at greed motivated rebellion, scholars argue that presence of commodities like oil, minerals, gemstones and drugs fuels greed motivated rebellion (See eg Grossman 1991; de Soysa 2000, 2002; Collier and Hoeffler 2004; Ross 2004*a,b*).

¹¹The effect of political transition and the reorganization of a state is within related fields viewed as a window of opportunity for groups that seek political power. Social unrest, coup d'état, onset of civil and international war are more likely to take place during regime transitions (Hegre, Ellingsen, Gates and

CHAPTER 2. LITERATURE REVIEW

lowing Indonesia's democratic transition in the 1990s was an outburst of all types of collective violence. While scholars stress the importance of other factors than political change, they all agree the transition spiked communal violence (Tadjoeddin and Murshed 2007; Van Klinken 2007b; Tajima 2013). When incorporating the direction of change, evidence from Kreutz and Eck (2011) and Tajima (2013) find that democratization leads to an increase in non-state conflicts.

Compared to the grievance based explanations, opportunity based explanations do not posit the same share of scholarly examinations. Whereas the literature focusing on inequality and non-state conflicts is vast, the role of opportunity based explanations remains understudied. For example, the studies on natural resources have been restricted to in-fighting in civil war. This means that we do not know much about how resources influence non-state conflicts outside the context of civil war. When looking at opportunities for mobilization by regime change, the examination by Kreutz and Eck (2011) is the only large N- study available. While there exists some studies of non-state conflicts and regime change, these tend to be from the same high profile cases. In relation to non-state conflicts, Kenya and Indonesia are well studied, but other transitions are not.

2.4 Summary and Remaining Research Gaps

In this section, I have reviewed the literature of non-state conflicts. Three strands in the literature have briefly been addressed: grievance based explanations, leader manipulations and opportunity based explanations. Since the majority of non-state conflicts are explained by grievance induced inequality, the review this strand have been the most comprehensive.

As mentioned at the beginning of this chapter, the majority of research on non-state conflict has been case studies. Case studies are often fruitful in the sense that they propose new hypotheses and mechanism to test. I do by no means question their importance, but I will argue the field is ready for comparison across time and space. Systematic inquiry is long-desired. Cross validation calls for researchers to examine cases of non-state violence across both time and space. This is mainly a quantitative task, but since much of case-based evidence is drawn from Kenya, India and Indonesia, it applies to researchers using qualitative methods as well.

After reviewing the literature of non-state conflicts, it became clear that state and institu-

Gleditsch 2001; Mansfield and Snyder 2005; Geddes 2009; Gleditsch and Ruggeri 2010).

2.4. SUMMARY AND REMAINING RESEARCH GAPS

tional structures must be incorporated in the explanations of non-state conflicts. These calls for an approach where state attributes make up a part of the explanations. When reviewing the literature it became clear that some explanations remain understudied compared to others. In particular, explanations focusing on opportunities remains understudied. My contribution to the field will be to address the opportunities for violence stemming from regime changes. With a few expectations, evidence here are solely drawn from the Indonesia and Kenya case. It is this nexus I want to investigate. In the following section I will develop a theoretical framework of how state attributes like representative institutions and state capacity affect the risk of non-state violence in critical conjectures like regime change.

Chapter 3

Theoretical Framework

In this section I will present a theoretical framework based on how state attributes like representative political institutions, bureaucratic and administrative state capacity are important determinants in explaining the variation we see in non-state conflicts across states. While representative political institutions inhibit incentives to reduce and solve grievances between groups, the actual potential of doing so hinge upon bureaucratic and administrative state capacity. This leads to an approach where I distinguish between the input and output side of politics. Further, I will present how regime changes constitute a critical conjuncture where violence is likely to increase. However, the conflict increasing effect of regime change is expected to be mediated by strong bureaucratic and administrative state capacity.

This framework will draw on theories borrowed from the broader conflict literature. Compared to the literature of civil conflict, there do not exist the same amount scholarly examinations for non-state conflicts. Consequently there is a lack of specified theories for non-state conflict. My solution to this is to apply theories from the broader conflict literature and see if they are applicable to non-state conflicts. While the theories chosen mainly inherit from the civil war literature, I do not find the scope of the arguments restricted to civil conflict.

I rely on a theoretical framework with the existence of two type of actors: political leaders and multiple groups.¹ Compared to each other, the political leader represent a tiny elite and the groups represent factions within the citizens.² Jointly, the groups represent a more

¹While the existence of groups in itself is not trivial assumption, it as a plausible assumption. Scholars like Gurr (1993), Horowitz (1985) and Stewart (2008a) recognize group membership as an intrinsic part of social and political life.

²This resembles and is inspired by Acemoglu and Robinson (2006, pg. 15) way of conceiving society consisting of two groups: the elites and the citizens. I adopt their argument and transfer it non-state conflicts. The main adjustment is done on the citizen part of the twofold societal conception. Whereas

numerous portion of the citizens than the political leaders. The assumption regarding their behaviors is that both actors seek to maximize wealth. This assumption leads to an inherently conflictual relationship between the actors. If wealth is to be maximized for political leaders it will be on expense of the groups' wealth. Connected to the maximization of wealth are the divergent preferences of political regime. The logic is simple: with only one cake, the more people invited the less cake for each person. Since a political regime by definition is the set of procedures determining the distribution of power, each actor will prefer the political system that respectively benefits their wealth. Compared to a democracy, an autocracy represents the preferences of a much smaller subset of society. Political leaders will then prefer autocracy. For the groups, the preferred regime type is democracy as this type opts for pro-majority policies. Since wealth is distributed to a subset of the population, autocracy also represents inequality. On the contrary, democracy represent equality since it favors the majority (Acemoglu and Robinson 2006).

In non-democracies, political leaders set the rules of the game and have de jure political power. But since the groups represent the majority, they have de-facto power. They can challenge the regime if they want to. Political leaders fearing their power can then make a trade off. In exchange for political support they can share a portion of their wealth with fractions within the greater population. From the broader conflict literature we know that, inequality and marginalization are conflict inducing situations. When division of wealth leads to a distinction between the favored and the un-favored, grievance is induced. In the worst case, grievance provokes civil conflict between the groups and the state. For non-state conflicts, the path from grievance generated by the government to the situation where groups take up arms against each other is not so obvious. But, it is possible. From the literature review it became clear that that state and institutional structures must be incorporated in the explanations of non-state. Non-democratic regimes and malfunctioning state structures are expected to be strong predictors for non-state conflicts. I will now proceed by developing a framework where states represent the structural condition making non-state conflicts more or less likely (Acemoglu and Robinson 2006).

Acemoglu and Robinson treat the citizens as one unit, I treat the citizens as multiple factions.

3.1 Representative Institutions: Incentives to Reduce Tension and Solve Conflicts

My theoretic approach depends on a separation of the input and output sides of politics. The justification for doing so will be more thoroughly addressed subsequently. In this section I will address *formal democratic institutions* here. A more precise definition of the concept is given by Hegre and Nygård (2014, pg.7): "Institutions where the executive power is elected by a majority or a plurality of the population and that there exist constraints on executive powers by an elected legislative." By formal I mean they are part of the input side of politics, only related to the election of leaders. I will start by presenting arguments from the broader conflict literature before I narrow it down to expectations regarding non-state conflicts. In general, I concur on the grievance reducing effect of representative institutions, finding the argument directly transferable to non-state conflicts.

The most widely held notion in the conflict literature is that democracies experience less conflicts compared to other regimes. While the effect is biggest at the dyadic level, the effect holds at individual state level as well (Russett and Oneal 2001). For civil conflicts, scholars find an inverted U-relationship between regime type and civil conflict. Intermediate regimes, or semi democracies, are more conflict prone than autocracies and democracies (Gates et al. 2006; Hegre et al. 2001; Muller 1985; Muller and Weede 1990). Scholar seeking to explain this tendency offer grievance and relative deprivation based arguments (See eg. Davies 1962; Gurr 1968; Hegre et al. 2001). Since non-democratic regimes per se are unequal societies, they serve to produce grievance. Governments are seen responsible for the "expectations- ability discrepancy." By not being representative, or by favoring parts of the population, government generates grievance induced conflicts. In the worst case, this is manifested through civil war.

Do the same logics apply to fighting between groups? Since non-state actors fight each other, rather than the state, is it possible for representative institutions to reduce conflicts between non-state actors? I would argue so. Within the literature, there are many arguments speaking in favor of a conflict reducing effect of representative institutions for tension between groups. Simply by being inclusive, properly functioning political institutions reduce grievance in society at whole. They pacify society by providing non-violent channels for conflicts resolution through political inclusion (Muller and Weede 1990; Hegre et al. 2001; Cederman, Wimmer and Min 2010).

The mechanism behind the conflict reducing effect of representative institutions is related to leader selection and leader removal. The effect of leader selection and leader removal put

3.1. REPRESENTATIVE INSTITUTIONS: INCENTIVES TO REDUCE TENSION AND SOLVE CONFLICTS

forward incentives for leaders to reduce grievance and solve conflicts in non-partial matters, which serves to reduce conflicts (Hegre et al. 2001; Fearon and Laitin 2003; Cederman, Hug and Krebs 2010; Hegre and Nygård 2014).

Following the approach of Hegre and Nygård (2014), I focus on *incentives*, rather than real actions. Initially this might seem a bit vague, but there are reasons for doing so. Firstly, there exist many non-representative regimes inducing policies favoring the whole population. In order to conceptually distinguish these regimes, I focus on incentives. Autocrats might be nice, but there exist no incentives for them to behave so. A second reason for focusing on incentives is the tendency among scholars to juxtapose representative institutions with good governance (See eg. Hegre et al. 2001; Fearon and Laitin 2003; Collier and Hoeffler 2004). For instance, Hegre and Nygård (2014) stress the importance of treating decision making and implementation as different concepts. Whereas the first concept relates to the set of procedure defining how power is distributed, the latter does not. This means that elected governments may fail to govern despite the best of intentions. The actual potential of fulfilling policies, hence good governance, might hinge on other aspects than formal institutions themselves. Jointly, this justifies a focus on incentives.

For non-state conflicts, representative political institutions serve to (1) reduce tension between groups and (2) act as neutral mediators when conflict occurs. Selection of leaders into central positions, through general elections put forth incentive to govern in ways that reduce the "expectations- ability discrepancy." This calls for less inequality between groups, a factor strongly related to the occurrence of non-state conflicts. The fear of the ballot box put forth incentives for political leaders to promote policies reducing tension between groups. If leaders seek a new term in office, the chance will be best if groups believe their grievance will be addressed and taken seriously. This mechanism put forth incentives for political leaders to induce policies reducing tension rather than policies increasing them. While the fear of the ballot box initially serves to reduce tension, it also creates incentive for leader to act as neutral mediators when conflict occurs. If political leaders are portrayed as neutral mediators, instead of biased agents, re-election becomes more likely. Jointly, the effect of leader selection and leader removal leads to the expectation about less non-state conflicts in states with representative institutions.

For non-state conflicts, the grievance reducing effect on non-state conflicts is related to formal political institutions. This relationship concurs with the expectations from the broader conflict literature. From civil war literature, many scholars stress how intermediate regimes inhabit certain characteristics that make them in particular conflict prone. By their combination of being somewhat open and somewhat repressive, an intermediate regime creates

grievance due to its openness and the opportunities to display them (Muller and Weede 1990; Hegre et al. 2001; Mansfield and Snyder 2009). For non-state conflicts, I question a non-monotonic effect by representative political institutions. I have two objections to why this expectation represents a case where logics diverge between non-state conflicts and state-based conflicts. Firstly, I expect incentives for reducing tension to have a monotonic effect. The logic behind this is simple: The less open, the less incentive to reduce and solve tension. Secondly, the argument behind the inverted U involves aspects of opportunity based explanations. The opportunity to display violence is mostly related to the regime's repressive capabilities. I focus on formal political institutions, which is conceptually different from repressive capabilities. Jointly, this leads me to conclude with following relationship between representative political institutions and non-state conflicts:

H1: Representative political institutions decreases the risk of non-state conflicts.

3.2 State Capacity: Capacity to Govern and Provide Order

The second aspect of state attributes I will address is *state capacity*. In the previous section, I focused on how incentives to solve non-state conflicts between groups. The reason for doing so was the conceptual difference between decision making and implementation of policies. This section addresses the latter. State capacity encompasses to which extent states are able to govern and carry out their politics, making state capacity is the pre-condition for governance. In particular, I will argue that *bureaucratic and administrative state capacity* is the most important aspect of state capacity in relation to non-state conflicts.

3.2.1 State Capacity

Despite being conceptually linked, "state capacity" is used as a all-encompassing concept for nearly everything enabling states to perform properly. It is an elusive concept open to many interpretations. Since there no consensus on how to define state capacity, scholars interpret it differently. This leads to a mixed and confusing empirical record, where the same indicator for different concepts, consequently leading to diverging inferences (Fjelde and de Soysa 2009; Hendrix 2010)

Most traditionally, state capacity is defined as the state ability to deter or fight back chal-

3.2. STATE CAPACITY: CAPACITY TO GOVERN AND PROVIDE ORDER

lenges to its authority with force. The establishment of a strong coercive power imposing order from above is the Hobbesian solution to civil peace. The more modern version of this notion could be traced back to the Weberian state definition. Weber ([1918]1946) views the state as a source of political order based on its monopoly over the means of violence. In the Weberian sense, coercion is the distinct property of states.³ In civil wars, this argument have been used to explain why rebel groups in some cases take up arms against the government and in other not. According to Fearon and Laitin (2003) states with weak state capacity have limit ability to counter insurgencies. The mechanism which leads to civil peace is deterrence and counter insurgency capability. With a strong military capacity and institutions able to penetrate into every corner of society, states deposit the means to counter insurgency. Other scholars find the same relationship. When rebels face a strong military, calculations about the cost of rebellion are higher when the state's military capability is strong (Collier and Hoeffler 1998; Mason, Weingarten and Fett 1999; DeRouen and Sobek 2004)

Many scholars have used regime type to measure state capacity. By incorporate aspect of political regimes in their interpretation of the concept, they pose a argument where intermediate regime have the highest risk of armed conflict. These scholars offer an argument where consolidated democracies have institutionalized channels for addressing grievance. Autocracies have the same effect on conflicts, but through different mechanism. The combination of repressive powers and hostile leadership deter potential dissentients, making rebellion less likely. The combination of being somewhat repressive and lack of strong state capacity makes intermediate regimes a breeding ground for civil conflict (Muller and Weede 1990; Hegre et al. 2001; Reynal-Querol 2002).

While a focus on crude military power can explain why groups do not dare to challenge the state, the argument has not the same leverage when explaining non-state conflicts. The main objection is based on how a functioning bureaucracy is the pre-condition for military strength to work efficiently. A simple, but illustrating example is offered by Fearon and Laitin (2003): If states knew the location of rebels, they could simply send forces directly to the spot of the rebels. This makes the efficiency of military state capacity pre-condition upon another aspect, namely the source providing the information about rebel location. Hendrix (2010) offer a solution to this. Instead of focusing on military capacity, scholar should approach state strength by measure state ability to collect information and provide services.

³The Weberian state definition is twofold. While coercive power is one of them, an organization supporting the coercive power is the other. This usually requires some sort of centralized organization/ bureaucracy. This dimension of state capacity will be discussed in section 3.2.2.

3.2.2 Bureaucratic and Administrative State Capacity

I will argue that *bureaucratic and administrative capacity* constitute the most relevant aspect of state capacity when examining non-state conflicts. There are two mechanism related to this which jointly increased the risk of non-state conflicts. Firstly, state's ability to govern and provide services hinge upon bureaucratic and administrative capacity. It is a pre-condition for governance, central to prevent disorder and restore order. Secondly, bureaucratic and administrative capacity is important determinants for groups' security.

Bureaucratic and administrative capacity is usually defined as the government's penetration into all its territory, its ability to provide goods and services, its insulation from political pressure and its regular and meritocracies recruitment. Within the broader conflict literature, several scholars have argued states with bureaucratic and administrative capacity are better prepared to deal with conflicts (Skocpol 1979; Goodwin and Skocpol 1989; Schock 1996; Knack 2001; Fearon and Laitin 2003).

Goodwin and Skocpol (1989, pg. 500) investigates quality of bureaucracy in their study of social revolutions. They argue that several factors linked to performing counter-revolutionary tasks are more easily accomplished with the existence of a functional bureaucracy. Territorial control, co-optation of elites, removal of an unpopular leader and transition to a more open regime are more easily done in state with bureaucratic and administrative capacity. For civil wars, scholars find the same relationship (Schock 1996; Fearon and Laitin 2003; DeRouen and Sobek 2004). Nearly identical arguments are offered. For instance, Fearon and Laitin (2003) put emphasis on how a functioning bureaucracy enables penetration into every corner of society. A functioning bureaucracy makes it easier to prevent disorder and restore order.

Common for the scholars examining bureaucratic and administrative capacity is how they imply a relationship where execution of state policies depends upon bureaucratic and administrative capacity. It is somewhat a pre-condition for governance. Firstly, states with functioning bureaucratic and administrative capacity acquire information about their citizens. This is not only central for detection of rebel movements, but also to gives government information about problems and grievances within the broader population. Secondly, the execution of government policies hinge upon a functioning bureaucracy. Implementation of policies is much more easily executed through a functioning bureaucracy.

A central task for any government is to provide order for their citizens. While the incentives to reduce conflict and provide order hinged upon type of political regime, the actual execution of order is dependent upon bureaucratic and administrative capacity. A state with a

3.2. STATE CAPACITY: CAPACITY TO GOVERN AND PROVIDE ORDER

malfunctioning bureaucracy will lead to situations where groups cannot rely on the state for security. Compared to functioning bureaucracies, malfunctioning bureaucracies are defined by their lack of political independence, the temporal stop of services during changes, lack of day-to day routines and patrimonial procedures. For groups, this means that state no longer constitute a trustworthy source as a provider of security.

A malfunctioning bureaucracy will often lead to perverted situations. Whereas state agents in functioning bureaucracy do not constitute a threat to people, they do so in the context of a malfunctioning bureaucracy. Bates (2008) argues that the key to understanding why violence become so prevalent in late century Africa lies within states and their ability to provide order. At this time most African states lacked revenues to fund their public services, which lead to a deterioration in states' bureaucracy and administrative capacity. Within this context, violence became endemic. When state officers started seeking wealth by engaging in corruption and predation, the state became an enemy groups need protection from. It failed at its most crucial task, namely providing security. Groups took up arms to defend themselves. Consequently, it leads to a shift in the regulation of violence from state-based to privately based. With an increase in the number of armed groups came also an increase in non-state conflicts.

The mechanism which leads to non-state conflict in malfunctioning bureaucracy is through the security dilemma generated. When context resembles anarchy, which is the consequence of a perverted and malfunctioning bureaucracy, groups have to provide for their own security. While this theory origin from structural realism within international relations, the theory have been applied to context lacking a Sovereign.⁴ According to Posen (1993), the condition that arise when similar groups of people suddenly find themselves responsible for their own security resembles an emerging anarchy. To solve this situation, the will rely on group security. With the absence of a sovereign, group cohesion becomes the basis of security. Consequently, a malfunctioning bureaucracy leads more armed groups, hence an increase in the risk of non-state conflicts.

To summarize, a state's bureaucratic and administrative capacity affects (1) the state's ability to govern and (2) groups' interpretation of their security status. With a malfunctioning bureaucracy states no longer possess the capacity to govern their societies. Since even the most non-democratic state prefer order over disorder, the lack of the instrument needed to provide and restore order leads to an increase in non-state conflicts. For non-state actors, a malfunctioning bureaucracy leads to deterioration their security status. When groups do

⁴See Jervis (1978)

no interpret the state as an actor they rely on protection from, protection have to privately supplied. Jointly, these two aspects of bureaucratic and administrative state capacity lead to the following expectation:

H2: Weak bureaucratic and administrative state capacity increases the risk of non-state conflicts.

3.3 Regime Change: Motivation and Opportunity for Conflicts

In the previous section I have suggested how representative institutions and bureaucratic and administrative capacity are expected to explain the variation we see in non-state conflicts within states. I would argue *regime change* constitute a process where non-state conflicts are likely to increase.⁵ For non-state actors, a state occupied reorganizing provides motivation and opportunity for political entrepreneurs as well as it constitute a threat to group's security.

I will start off by looking at general mechanism related to regime change and armed conflicts before I more narrowly provide the expectations regarding non-state conflicts. Direction of change will also be considerate.

3.3.1 Regime Change per se

For a regime change to occur the old regime must agree upon transition or it must be forced to transit. According to Horowitz (1993), regime transitions are a complicated process, characterized by conflicts of interests and social unrest. Empirically, scholars concur on this relationship. Regime change is linked to social unrest, coup d'état and onset of civil and international war (Hegre et al. 2001; Mansfield and Snyder 2005; Hegre and Sambanis 2006; Geddes 2009; Gleditsch and Ruggeri 2010).

Within the civil war literature, both motivation and opportunity have been used as explanations for the conflict increasing nature of regime change. Non-representative institutions provide motivation as the by nature are systems characterized by inequality. In addition, a regime resisting political opening, will often serve to fuel grievance even more. As regime

⁵I will not discuss the driving force behind political change itself. I will only discuss the conflict increasing potential caused by regime change.

3.3. REGIME CHANGE: MOTIVATION AND OPPORTUNITY FOR CONFLICTS

changes alter the set of procedures distributing power, leader may have strong incentives in avoiding transition. Fighting for their wealth and power, the governing regime may be willing to repress in order to resist a transition. The use of repressive means may serve to fuel tension even more (Acemoglu and Robinson 2006). While grievance may be directed against an old regime, it could also be directed against a new regime. Depending on the degree of legitimacy, political leaders enter office under more or less ideal conditions. Lacking popular support, the process of establishing new political structures may be difficult if it simultaneously involves fighting actors questioning their legitimacy (Hegre et al. 2001; Gleditsch and Ruggeri 2010)

The opportunities stemming from regime changes are generally connected to the lack ability of to govern. Regime changes do constitute an intermediate period, where state functions temporally are set aside and consolidation have not started. Firstly, regime change tends to temporally (or completely) set aside the state's ability to govern. This means that actor previously fearing a repressive government, will have less to fear in the wake of a regime change. Secondly, proximity to the change itself serves as an opportunity for actors seeking political leverage. Since political consolidation occurs over time, future political leverage depends on mobilization close to change, hence before the regime consolidates. (Hegre et al. 2001; Gleditsch and Ruggeri 2010)

For non-state conflicts, much of the scholarly debate on regime change is linked to fighting between rebel groups in civil war. When a regime is on the verge of collapse, fighting between rebel groups increase. Fjelde and Nilsson (2012) explain this by rebels' strive to maximize political concession. If a rebel group arrives as sole conqueror, defeating both rival rebels and the government, their political leverage will be maximized. In their study, Fjelde and Nilsson (2012) find support for increased in-fighting in the presence of a weak government on the verge of collapse.

While rebel groups have the goal of government overthrow, this is not true for all non-state actors. Kreutz and Eck (2011) suggest that regime change also affect communal conflicts by providing motivation and opportunity. Firstly, regime transition can serve as an incentive for political entrepreneurs to provoke conflicts to display their leverage. Simply by being able to mobilize for a conflict, groups display their magnitude and importance. If this group is not represented in the new regime, it has the potential of becoming a worrisome opposition. Secondly, groups that question the new regimes authority can display their disloyalty by performing state-like services. The perhaps strongest signal of disloyalty is sent by policing another group, hence questioning the new regime monopoly one the use of violence.

CHAPTER 3. THEORETICAL FRAMEWORK

Regime change also affects actors not seeking political leverage. According to Kreutz and Eck (2011), regime change alters the state's ability to provide security. Due to its chaotic nature, state services will temporally or completely stop to function. Most importantly, this applies to the regulation of violence and order. In the wake of a major regime change, the state's ability to regulate violence is reduced. A state busy occupied reorganizing will canalize its resources to establish control at the center. Conflicts and issue not related to national politics will then be pushed down the agenda. This leads to a general reduction in regulation of conflicts, hence the occurrences of non-state violence increases. When transition leads to a collapse of all state services, groups themselves have to provide for their own security. The consequence for groups is that the security dilemma by no means are solved, causing groups to provide security privately. For long lasting transitional periods characterized by the complete disintegration of state structures, groups will seek private solutions to security. This leads to a shift in regulation of violence, from state-based to privately-based.

In some cases, regime change will lead to a complete evaporation of state structures. In the wake of a state collapse, groups' themselves becomes the provider of security. This leads to the same mechanism as a malfunction and perverted bureaucracy. What distinguishes them is their origin. When anarchy emerges, individual turn their groups as providers of security (Posen 1993; Cederman, Wimmer and Min 2010)

To summarize, regime change present an opportunity and motivation for dissatisfied non-state actors to increase their future leverage. Political leverage may be increased by fighting off rival non-state actors or displayed by policing other non-state actors. For those not seeking political leverage, regime change leads to a deterioration of their security status. Despite different mechanisms, they provide the same expectation regarding regime change and non-state conflicts:

H3a: Regime change increases the risk of non-state conflicts

3.3.2 Direction of Regime Change

While I find a general expectation for a conflict increasing effect of regime change, a more nuanced picture would incorporate the direction of change as well. Since democratization and autocratization bring different changes regarding the set of rules, it bring brings up a question whether the causal mechanism generating conflict are different.

The most widely held notion in the conflict literature is that democracies experience less conflicts compared to other regimes (Russett, Layne, Spiro and Doyle 1995; Oneal and Russett

3.3. REGIME CHANGE: MOTIVATION AND OPPORTUNITY FOR CONFLICTS

1997; Bueno de Mesquita, Morrow, Siverson and Smith 1999). These findings have led to promotion of democracy as a strategy to build civil peace. However, the process of democratization has often been less than peaceful. Bratton (2006, pg. 97) note that Africa's democratic transitions were successful in the case of South-Africa, but in other cases the result was devastating. Nigeria ended upon in havoc, a fate shared with many other African countries exposed the democratic experiments of the 1990s.

The dark side of democratization have lead many scholars to question the promotion of democracy as peace inducing strategy (Gleditsch and Ward 2000; Mansfield and Snyder 2005) In a series of publications, Mansfield and Snyder (1995*a,b*, 2005, 2009) have addressed the conflict inducing potential of democratization. They argue that democratization often have been induced in countries lacking the institutional starting point required for a successful transition. As democratization brings an opening of the political landscape, thereby an arena for actors to claim the interest, democratization becomes dangerous when institutions are not ready to annex claims.

According to Acemoglu and Robinson (2006) the conflict inducing effect of regime change depends upon state's starting point. The starting point of the transition process leads to diverging mechanism with regard to the outcome. In general, the assumption regarding preferred political alternative remains the same for political leaders and groups. In autocracies, where the state leader only constitutes a small proportion of the citizen, democratization will decreased their wealth significantly. To avoid this, they will resist the process. For the groups, the preferred regime type is democracy as this type opts for pro-majority policies. By diverging starting points, Acemoglu and Robinson (2006) focus on socio-economic aspects of countries. Whereas wealth in low developed countries is linked to land, it is linked to capital in developed countries.

Under low levels of economic development, the tradeoff of a political opening will be high for the political leaders. The loss by democratization is then high, leading to resistance. This leads political opening in low developed countries to become a process characterized by violence. Democratization happens peacefully when elites have more to loose from continuing repression and buying concession than they have from resisting democratization. This is often the case in high developed countries where the costs connected to resistance will have a devastating impact on capital. Social unrest has a devastating effect on capital, affecting leaders will to resist transition. A peaceful democratization is somewhat an admission of failure on behalf of the elite.

For non-state conflicts, the logic by Acemoglu and Robinson (2006) is almost directly transfer-

able. For non-state conflicts, both autocratization and democratization bring opportunities of conflicts due to destabilizing effect of regime change. The conceptual difference between democratization and autocratization is the motivation for conflict. The aggregated motivation to resist autocratization will always be bigger than the aggregated motivation for resisting democratization. Since autocratization leads to a narrowing of the political landscape, it potential grievance generated will always exceed the grievance generated by a political opening. This is simply due to narrow support base in an autocracy compared to a democracy. Hence, I find a conflict decreasing potential of autocratization. Following hypotheses are suggested

H3b: Autocratization increases the risk of non-state conflicts

H3c: Democratization increases the risk of non-state conflicts

H3d: Democratization decreases the risk of non-state conflicts

3.3.3 The Mediating Effect of Regime Change by Bureaucratic and Administrative State Capacity

Among the aspects included in the concept of bureaucratic and administrative state capacity, is the ability to govern through regime change. While the bureaucratic and administrative state capacity also includes many other aspects, the focus of this thesis is regime change. This leads to some curiosity regard the *effect* of bureaucratic and administrative state capacity. Could the relationship be conditional?

Since bureaucracies represent the core of governments, the role of bureaucrats is especially crucial in the process of a transition. While governments succeed another, either through drastic changes or by constitutional procedures, bureaucrats are expected to remain at their post providing maintaining activities as usual. While a new administration might be eager to establish its own identity and dissociate itself from the previous administration, replacing the whole governmental machinery might be a bad idea. New regimes must to some degree rely upon existing bureaucracy while new policies are being fashioned (Frank 1966).

Many scholars included the ability to govern as an aspect of bureaucratic and administrative state capacity. While they also include other aspects, they all suggest that transition is more easily accomplish within a well-functioning bureaucracy (Skocpol 1979; Goodwin and Skocpol 1989; Schock 1996; Knack 2001; Fearon and Laitin 2003). This leads to an expectation about the mediating effect on the risk of non-state conflicts caused by regime change, leading to the following hypothesis:

H4: The conflict increasing effect of regime change is conditioned upon bureaucratic and administrative state capacity

3.4 Summary

In this chapter I have developed a theoretical framework where state structures are used to explain the variation in non-state conflicts we see within states. I have derived expectations regarding representative institutions and state capacity. By being inclusive, representative institutions provide political leaders with incentives to provide order and restore order. The ability to fulfill incentives hinges upon bureaucratic and administrative state capacity. If political leaders want to provide order, a functioning bureaucracy enables them to do so. A functioning bureaucracy is also crucial for how groups interpret their security. A malfunctioning and perverted bureaucracy leads to situations where groups can no longer rely on state agents for protection. This leads to the armament of non-state actors, hence increasing the risk of non-state conflicts.

While the contextual setting alone can be seen as a necessary condition for non-state conflicts, it is not a sufficient explanation. I have therefore supplemented the framework with explanations focusing on both opportunity and motive for non-state conflicts. In the wake of a regime change, political entrepreneurs have both the motivation and opportunity needed to impose conflicts. Regime change also relates to how groups interpret their security situation. If regime change equals anarchy, with the evaporation of state structures, groups will seek protection privately. This leads to both an increase in armed groups, consequently followed by an increase in non-state conflicts.

Chapter 4

Research Design

The aim of my thesis is to investigate whether variation of non-state violence can be explained by regime change and whether the effect of regime change is conditioned upon state capacity. In general, low state capacity and non-representative institutions are hypothesized to increase the risk of experiencing non-state violence. Regime change is hypothesized to be a window of opportunity for actors wanting to manifest their political leverage or to signal dissatisfaction with a governing regime. In this chapter I develop a quantitative research design aimed at testing these expectations. This chapter will bridge the gap between the theoretical framework and the empirical data. Firstly, I will justify why a quantitative approach is suited to answer my research question. Secondly, I will outline how the data set covering the 1989-2008 periods is assembled and how key variables are operationalized. Thirdly, I will present the statistical methods used to test the hypotheses, namely the logistic regression model and the negative binomial model. Fourthly, I will address the methodological challenges with regarding my research design.

4.1 Justification of a Quantitative Approach

I follow the recommendations of King, Keohane and Verba (1994) contending that the goal in social sciences is to make causal inferences based on observations of a phenomena. This call for an approach comparing contexts and situations where violence occurs and where violence does *not* occur. When reviewing the literature of non-state conflicts, I brought up the missing quantitative application as well as the tendency for scholars to examine the same cases. Much has been written on non-state conflicts in Kenya, India and Indonesia. Little

have been written about non-state conflicts in Sweden, Japan and Canada. If we want to say something more *general* about non-state violence we need to expand our research in time and space. Simply the lack of cross section research alone serves as a justification of a quantitative approach.

Compared to qualitative methods, a quantitative approach has the possibility of disclosing general patterns of phenomena. However, there are also drawbacks to the application of this method. Statistical estimation techniques assume the impact of covariates to be the same across observations. To assume that the same logic can be applied to phenomena in social sciences will often be inaccurate or incorrect. Failing to meet model assumptions and requirements lead to biased and imprecise results. But, discarding the quantitative method is neither an option. When precaution is taken, statistical methods can be powerful tools for disclosing general patterns. This pitfalls imply that researcher need to find a method suited to examine their data.

Fulfilling statistical assumptions does not automatically translate into valid inferences. While precise estimates depend on the model and data, valid inferences hinge on operationalization of central concepts. With regards to internal validity, the qualitative approach is superior. Construct validity will always be the Achilles's heel of the quantitative method. Will the operationalized variable ever truly capture the theoretical concept? Is it plausible to believe that the number of -0.25 reflects a low level of bureaucratic quality? And, it is plausible to believe the impact on conflict is the same whether the value of -0.25 comes from Uganda in 1989 or Indonesia in 2003? The number -0.25 on an index of bureaucratic quality might have a *different* impact on conflict in Uganda in 1989 and Indonesia in 2003. On the other side, there are also limitations inherited in the qualitative approach, especially with regards to generalization. The choice between a quantitative and a qualitative approach will always reflect the trade-off between internal and external validity (Adcock and Collier 2001). As my goal is to reveal whether there is a *general* pattern between weak states, regime change and non-state violence, a quantitative approach is preferred.

4.2 Statistical Model and Dependent Variable

There exist only one comprehensive data source on non-state conflicts, which is the UCDP non-state conflict data set. This means that how UCDP records non-state conflicts will put forth the conditions on how non-state conflicts could be analyzed. In my case, it follows that a plan for examining non-state conflicts will have to start with examining which type of

dependent variable I can construct using the UCDP data.¹

Originally, the UCDP non-state conflict data set is in a dyadic format, where each observation contains information of the dyad on a yearly basis. Besides name and year, each observations also provide information about the actor's organization level, name of the parties involved, number of yearly fatalities, which state the conflict is located in and whether the conflict has ended or not Sundberg, Eck and Kreutz (2012). While the process of non-state conflict in reality is a continuous phenomenon, the data from UCDP record it as a discrete outcome. This means that they are *latent* in the sense that they in reality is a continuous process. There is an underlying tendency generating the observed value. We cannot directly observe this tendency, but at some point this process results in an observable change. For UCDP, non-state conflicts are observed when conflict between non-state actors reaches a threshold of 25 battle related deaths a year (Long 1997).²

From the information offended by UCDP I find two possible operationalizations of a dependent variable. The first one is to construct a binary variable denoting whether the phenomena occurred or not in a given country year. Using this operationalization will lead to a logistic regression. The second possibility is to construct a count variable counting the number of occurrences in a country year. This operationalization would lead to a count regression. The logistic regression model will report the probability of experience one or more occurrences of non-state conflicts in a country year or not. The negative binomial regression will report the number of non-state conflicts occurrences a state is likely to experience in a country year.

I have chosen a dependent variable counting the number of annual occurrences. The reason for this is the variation in annual occurrences across countries. Mexico had in 1993 one occurrence and India had in 1989 six occurrences. If only applying the logistic regression model, information may have been lost by treating these two cases as similar phenomena. The collapse of data with more than two unique values into a dichotomous variable (like occurrence or non-occurrence) may minimize the variance across the included observations. If collapsing categories leads to loss of information, the model will lose its statistical power. This in return will increase the chance of accepting the null hypothesis when there potentially exist a relationship between the dependent and the independent variables.³ It is this potential pitfall that leads me to settle for a dependent variable that counts the number of annual

¹Whether the dependent variable serve as a good indicator of the phenomena will be discussed in section 4.3.2.

²In more mathematical terms, there is an unobserved, or *latent* variable y^* ranging from $-\infty$ to ∞ that generates the observed y 's. Those who have larger values of y^* are observed as $y = 1$, while those with smaller values of y^* are observed as $y = 0$. (Long 1997, pg. 40).

³This situation is commonly referred to as type II error, which is the failure to reject a false null hypothesis.

occurrences of non-state conflicts.

4.2.1 Count Model: the Negative Binomial Regression Model

As the name suggest, count models estimates the probability for a given number of events to occur. While an Ordinary Least Squares (OLS) regression model could also be used for this purpose, the assumptions for the OLS-model is not met with my data. From Figure 4.1 it becomes evident that the dependent variable by no standards is normally distributed. The elongate tail goes to the right, suggesting that the data is highly skewed. This situation is caused by the preponderance of zeroes, or non-occurrences of the dependent variable. When assumptions behind the OLS- model is violated, count models are often preferable alternatives. These models, such as the Poisson model and the negative binomial regression model are tailored to handle count outcomes that are highly skewed (Long 1997).

The Poisson and the negative binomial regression model differs in their assumption with regards to the conditional mean and variance structure. To arrive at the choice of count model, the Poisson model serves as a starting point. The Poisson model assumes the conditional mean and the variance to be equal. The negative binomial model does not inhabit assumption, as the model allows the variance to exceed the conditional mean. In practice, this is often the case within social sciences. When variance exceeds the mean in count models, the situation is called *overdispersion*. In a case of overdispersion, the Poisson model is inappropriate. This will lead to a discrepancy between the observed and predicted values, and the Poisson model will underpredict zero values (Long 1997).

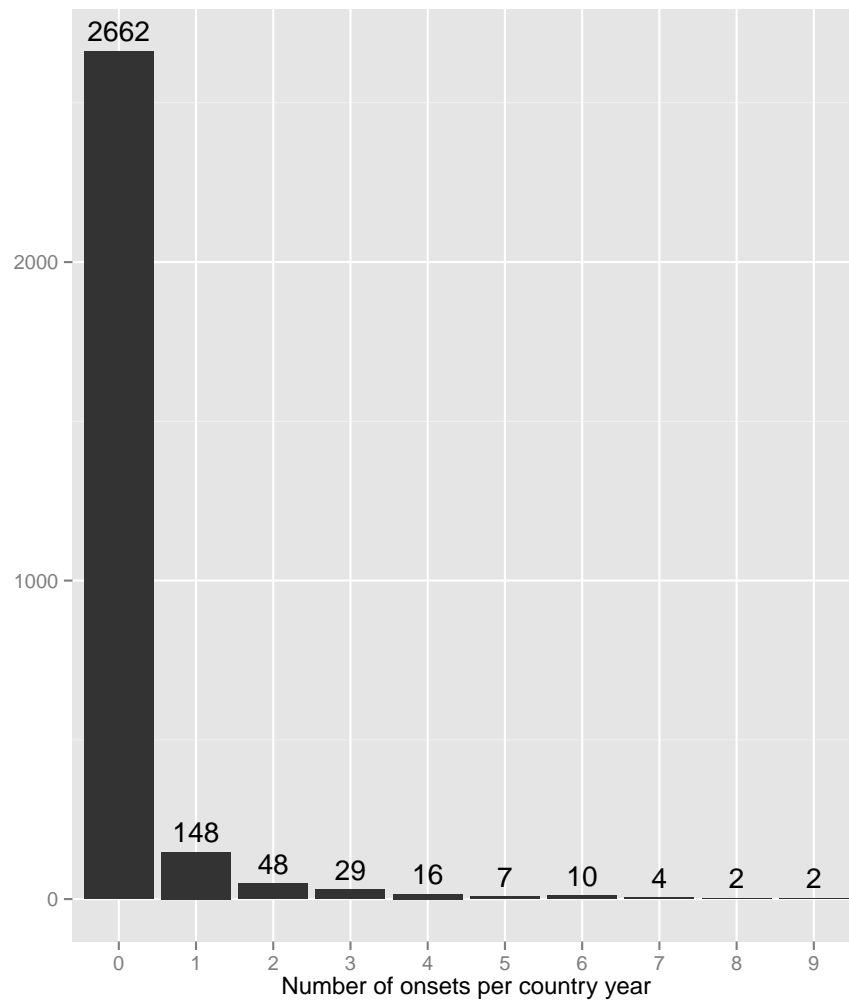
To test for overdispersion, the negative binomial regression model is used as a diagnostic tool. The potential discrepancy can be captured by estimating a dispersion parameter held constant in the Poisson model. In the Poisson model, variation in μ is due to *observed heterogeneity*. In the negative binomial model, μ is replaced by a random variable $\tilde{\mu}$. Variation in $\tilde{\mu}$ is due to both variation among the units caused by the covariates, but also to *unobserved heterogeneity* caused by ϵ .⁴ The negative binomial regression model accounts for this by adding a parameter θ . If θ is significant, a case of overdispersion exists (Long 1997).

The poisson regression distribution is given by:

$$\Pr(y_i | x_i) = \frac{e^{-\mu_i} \mu_i^{y_i}}{y_i!} \quad (4.1)$$

⁴For the mean of the error term it is common to assume that $E(\delta_i) = 1$, giving $\tilde{\mu} = \mu E(\delta) = \mu$

Figure 4.1: Distribution of non-state conflicts 1989-2008



And the negative binomial distribution is given by:

$$\Pr(y_i | x_i, \delta_i) = \frac{e^{-\tilde{\mu}_i} \tilde{\mu}_i^{y_i}}{y_i!} = \frac{e^{(-\mu_i \delta_i)(\mu_i \delta_i)^{y_i}}}{y_i!} \quad (4.2)$$

The negative binomial regression model reports the probability of counts when counts increase by one unit. The negative binomial distribution is a discrete distribution of the number of successes in sequence of Bernoulli trials before a specified number of failures occurs. Applying the negative binomial distribution to my case will be the same as treating occurrence of non-state as failure. Successes are the number of country years without conflict. The occurrence of non-state conflicts will be fixed and the number of country years without conflict is random. The model then calculates how many years without non-state conflict is needed to obtain respectively one, two, three or n occurrences of non-state conflict.

Table B.1 in Appendix A reports the results from the poisson model and the negative binomial model. In a model with just controls, the θ parameter is significant. When looking at the distribution of counts in Figure 4.1, the case of overdispersion becomes evident. Occurrences of non-state conflicts are rare events, manifested in the preponderance of zeros. In fact the zeros make up 92% of the observations included. The θ parameter reflects this, indication a situation with more observed 0's than predicted by the Poisson distribution.

To settle for the negative binomial model just because it can handle overdispersion is not sufficiently justified. If the cause of overdispersion and excess zeroes is due to an *additional* data generating process different from the one generating the counts, other models are more appropriate. Zero-modified models assumes that 0's can be generated from a *different* process than the positive counts. In my case zero modified models would have been worth investigating. However, they often demand a lot from the data and tend to be instable when requirements are not fully satisfied. As my data set is not as big as these models demand, I will not opt for a zero-modified model. This suggest that the model I have chose potentially will underestimate the number of zeroes. To overcome this problem I will cross validate my analysis by estimating a Hurde Model.

4.3 Operationalization

Testing the hypotheses put forth in the previous chapter require operationalization of theoretical concepts. For inferences to be valid, it is required for indicators to measure actually what they are supposed to measure, namely the theoretical concepts (Adcock and Collier

2001). Many of the theoretical concepts derived here are complex and abstract phenomena. The concept of state capacity serves as a good example here. Its elusiveness have led scholars to operationalize differently, consequently leading to diverging results (Hendrix 2010). In my case this is a challenge which I need to approach with great careful attention. For valid inferences to be drawn, indicators *must* reflect the theoretical concepts at hand.

4.3.1 Unit of analysis

Data on the unit of analysis is taken from UCDP/PRIO. They define a state to be: an internationally recognized sovereign government controlling a specified territory, or a non-recognized government whose sovereignty is not disputed by another internationally recognized sovereign government previously controlling the same territory (Gleditsch et al. 2002, pg. 612).⁵ Microstates with a recorded population of less than 500.000 are excluded by default. This is due to practical matters, as my other data sources do not record data for these states. The final data set consists of 150 states observed between 1989 and 2008, rendering 2904 observations.

4.3.2 Dependent Variable: Occurrence of Non-State Conflict

The phenomenon I am interested in occurs when a violent conflict breaks out between two groups and takes place without the involvement of state agents as one of the warring parties. To arrive at an operational definition on the occurrence of non-state conflict, I will address three issues. Firstly, the death threshold and coding criterions defining the occurrence of non-state conflicts. Secondly, the distinguishing of non-state conflicts contra other types of conflicts. Finally I will address the variety of groups that constitute non-state actors and how they relate to the theoretical framework put forth.

Coding Criterions and Death Threshold

Within quantitative conflict research, the concept of conflict is linked to the number of people killed in battle. Conflict becomes a question of lethality, as the number of deaths serves as the criterion defining conflict.⁶ While scholars agree upon the lethal criterion of conflict,

⁵This list is a modified version of the Gleditsch and Ward (1999) list of international system membership.

⁶Whereas the conflict is linked to lethal actions within the conflict literature, readers should be aware that the concept itself is multifaceted and open to more than one interpretation. Scholars within the conflict research usually adopts what Galtung (1969) defines to be a *negative* understanding of peace. Whereas negative peace is the absence of violence, positive peace is the pattern of cooperation and integration between

there seem to be less consensus about coding rules and thresholds to serve as standards for onset, duration and termination (Sambanis 2004b). The focus of my thesis is the occurrence, or the presence, of non-state conflicts in states. This means that I will not emphasize the difference between onset and duration, but treat them equally as situations where non-state conflicts occur.

For non-state conflicts to be observed, I have to define which number of annual deaths to apply. A common used threshold within the literature originates from UCDP's definition of *armed conflict*. In general, UCDP use the term *conflict* to address all sorts of disagreements between two actors (or a dyad) that have lethal consequences.⁷ An *armed conflict* is when this disagreement results in at least 25 battle related deaths a year. In conflicts involving states as actors, an additional threshold is used to separate conflicts due to their level of intensity. *Minor* is used to describe conflicts that reaches the annual criteria, but when this intensity exceeds more than 1000 annual deaths, the term *war* becomes the label attached (Gleditsch et al. 2002).⁸ In my case, the threshold need to be lowered. Since non-state conflicts do not inflict cause the same amount of damage as state based conflicts, the death threshold for non-state conflicts must be set with less strict criterion than state based conflicts.

While settling for coding criteria is a simple issue, the practical task of collecting this information is harder. Missing data and unreliable reports is endemic within the conflict literature. There are many factors that could complicate this task. The ongoing conflict in Syria serves as an example. In this case, non-state conflicts erupted within the context of a state-based conflict. The combination of an ongoing civil war and fractionalized rebel movements fighting each other, and the government, leads to difficulties in reporting. Establishing the exact relationship between victims and offenders will be hard, as victims could be killed in more than one conflict. Further have the escalation in violence since 2011 caused many reporters to evacuate the country, leading to a gap in reports and an underestimation of fatalities (UCDP 2014). These are issues researches need to be aware of as unreliable report and missing data could introduce bias in further analysis. However, this is the true nature of conflict research. Awareness rather than ignorance or abandonees is the solution (King, Keohane and Verba 1994).

UCDP's coding of fatalities is based on two independent sources, whom both are experts on humans.

⁷UCDP recognize three types of actors: states, non-state formally organized groups and non-state organized groups.

⁸Whereas the annual criteria of 1000 battle related deaths in civil war reflects the level of damage, the damage for states experiencing non-state conflicts will be a combination of the occurrences of non-state conflicts as well as the level of intensity in each non-state conflict.

the area they report from. While the number of sources cross validating fatalities numbers is low, their country expertise compensates. Figure 4.2 shows the number of yearly fatalities in the world caused by non-state conflicts in the period from 1989 to 2008. The peak in the early 1993 is mainly due to a high number of fatalities in isolated cases, as the number of conflicts does not follow the same trend. High fatalities between the Hutu and the Hunde in Congo (DCR) and between the Sudan People's Liberation Movement/Army (SPLM/A) and Souther Sudan Defence Force (SSDF) makes up the peak in 1993 (Sundberg, Eck and Kreutz 2012).

Distinguishing Non-State Conflicts From Other Types of Conflicts

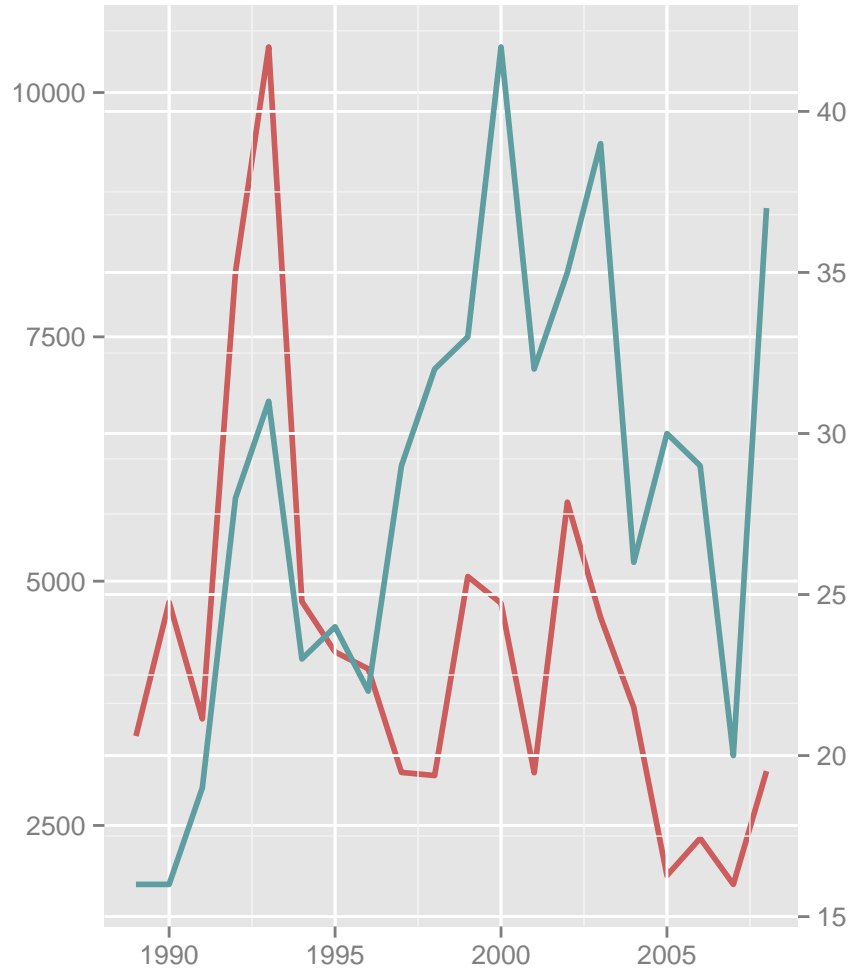
An operational definition of non-state conflicts excludes government as one of the warring parties. This is essential to the definition of non-state conflicts, as non-state conflicts is defined by the lack of a government involvement. Whereas recent literature has altered our conception of rebel groups as unitary actors (See eg. Bakke, Cunningham and Seymour 2012; Cunningham, Bakke and Seymour 2012), governments are usually assumed to be unitary actors. This is only a un-qualified truth, and such a conceptualization could be misleading (Carey, Mitchell and Lowe 2013).

The conflict in Sudanese region of Darfur displays how a distinction between non-state conflicts and state-based conflicts in reality can be blurry. While Darfur had seen several occurrences of communal conflicts prior to 2003, the situation became more critical after 2003 when a large scale conflict broke out between Africans and Arabs.⁹ Dissatisfaction with current situation led the two African groups, the Sudan Liberation Movement/Army (SLM/A) and the Justice and Equality Movement (JEM), to take up arms against government. The reaction from the Sudanese government was to carry out a campaign of ethnic cleansing against Darfur's non- Arabs. This task was partly done by the pro- government militia, the Janjaweed, wich the government supported with both training and weapons. This task was often carried out as a joint action between the Janjaweed and government forces (Brosché 2008). The same type of joint action between governments and armed groups have also been seen in the former Yugoslavia, Iraq, Sudan and Syria (Carey, Mitchell and Lowe 2013).

The Janjaweed is what Carey, Mitchell and Lowe (2013) define to be a *pro-government militia*. Pro-government militias are armed groups that are either pro-government or sponsored by the government. More important however, is the fact that pro-government militias do not

⁹The distinction between Africans and Arabs is a simplification as each party represent a variety of ethnic groups.

Figure 4.2: Number of fatalities in non-state conflicts, 1989-2008



Note: Red line and left side of y-axis reports the number of fatalities.

Blue line and right side of y-axis reports the number of conflicts.

Source: UCDP Non-state conflict dataset (Sundberg, Eck and Kreutz 2012)

constitute a legal part of the government's security forces.¹⁰ The UCDP non-state conflict data have no information about ties government and the non-state actors. When comparing the data on pro-government militia (PGDM 2013) with the UCDP non-state data set it becomes evident that certain groups overlap. How these groups affiliate with the government will vary, but common for them all, is that the distinction between states and non-state actors will not be clear cut.

Further, there are other issues making it hard to separate non-state conflicts from other types of conflicts. Collective violence takes many forms, but common for them all is that the categories are not static, as collective violence constantly transform and evolve. Neither are they mutually exclusive (Tilly 2003).¹¹ For the phenomenon investigated here it implies parties involved in one non-state conflict mutually could be involved in a conflict with the state. For nearly four decades, the FARC guerilla has fought the Colombian government.¹² Simultaneously FARC has been involved in non-state conflicts with AUC and ELN.¹³ Whereas some non-state conflicts give birth to civil wars, other erupt within civil conflict. The latter one is perhaps the most common. This is what we see in Chad, Iraq and Somalia. My data covers a total of 2904 observations, or country years. I have observation of non-state conflicts in 265 country years, which 96 of these years have an ongoing civil war. In percentage, the number is 35%.¹⁴

Following the chaotic setting that non-state conflicts erupt in, comes the problem of recognition. If boundaries are not clear, is really non-state violence a phenomena we are able to observe? The question to ask is; "Would we know a non-state conflict if we saw one?"¹⁵ I would argue that it is possible to distinguish non-state conflicts from other types of collective violence. While 35% occur simultaneously, this number does not imply that conflicts can not be distinguished from each other. Due to several territorial disputes, India have been in what scholars define as a minor intra state conflict for several decades. The conflict between Hindus and Muslim amount to nearly half of all non-state conflicts India has experienced since

¹⁰Often governments use pro-government militias to conduct shady actions they do not want to be held accountable of. By strategically using pro-government militias, governments can evade responsibility of violence away from themselves (Mitchell, Carey and Butler 2014).

¹¹On the topic of civil wars, Kalyvas (2003, pg. 475) neatly captures this complexity as he states: "Civil wars are not binary conflicts, but complex and ambiguous processes that foster the "joint" action of local and supralocal actors, civilians, armies, whose alliances results in violence that aggregates yet still reflects their diverse goals."

¹²The full name of the group is Fuerzas Armadas Revolucionarias de Colombia - Ejército del Pueblo (Revolutionary Armed Forces of Colombia - People's Army)

¹³The full names are Autodefensas Unidas de Colombia (United Self-Defense Forces of Colombia) and Ejército de liberación nacional (National Liberation Army).

¹⁴This estimate is based on 25 annual deaths threshold.

¹⁵This question resembles, and is inspired by, Sambanis (2004b) work on the conceptualization of civil wars.

Table 4.1: Categories of non-state conflicts

Category	Org. Level	Warring parties
Rebels	Formally	Fighting between rebel groups, military factions and other highly organized groups.
Political	Informally	Fighting between parties and candidates as well as electoral violence.
Communal	Informally	Fighting between groups that mobilize themselves among communal lines like: ethnicity, clan, religion, tribe or nationality.

Source: UCDP non-state codebook (Pettersen 2012)

1989. These are conflicts that are easily distinguished from the ongoing conflicts involving the Indian government in a far off territory. While Syria represent a case where recognition is difficult, it does not imply that all non-state conflicts erupting in civil wars are.

The Actors Included in Non-State Conflicts

I have chosen to apply a rather broad conception of non-state conflicts. This decision brings a very diverse sample of conflicts lacking state involvement. UCDP distinguish between non-state conflicts based on two dimension: affiliation and organization. This leads to a threefold categorization, displayed in Table 4.1. The two levels of organization are: formally and informally organized groups. Formally organized groups constitute any non-governmental group of people having announced a name for their groups and using armed force against another similarly organized group. These groups are permanently mobilized. When it comes to affiliation it should be noted that rebel group often share them same affiliation as communal groups. For instance, Hizbollah in Lebanon are based on religion, but due to their organization level they fall into the rebel category.

Table 4.4 is based on a sample of the non-state conflicts from the UCDP record. Simply by reading the names of the warring sides it becomes clear that the data set represent a variety of actors. This is also due to the lack of criterion for incomparability. They are organized on the basis of different factors like ethnicity, clan, political affiliation, religion or separatist movement. In South Africa, the recorded non-state conflicts are between political parties. Since 1989 there have been multiple clashes between the African National Congress (ANC) and Inkatha Freedom Party (IFP) as they have disagreed upon which strategy to pursue when trying to bring down the Apartheid regime. Criminal violence is also included as a type of non-state conflicts. In Mexico, non-state conflicts are primarily related to rivalry between drug cartels.

In terms of regional dispersion, Africa has the biggest share of non-state conflicts. In the period from 1989-2008, 71,9% of all non-state conflicts occurred in African countries. In Somalia, Nigeria and Sudan, the number of counts are respectively 75, 54 and 52. In Somalia, non-state conflicts was in the early 1990's between organized rebel groups fighting for dominance after the collapse of Siad Barre's military regime. After 1999, clan oriented conflicts constitute the majority of Somalia's non-state conflicts, as disagreements in the former rebel organizations led to a split into minor factions. From 2006 and onwards, Islamic militias have also been a part of the fighting in Somalia. In the case of Nigeria, conflicts have ethnic, political, economic, and religious components. Due to different dividing lines, various groups, and alliances of groups are put up against each other. While the overarching Christian-Muslim conflict seem like a religious conflict, it also have an ethnic dimension, as the majority of the 200 ethno-linguistic groups in Nigeria consider themselves Muslims or Christians. In Ethiopia, non-state conflicts have been fought between various tribes and clans. Many of these clans are divided into smaller subclans which live in pastoral areas between Somalia and Ethiopia. Clashes over access to water, arable land, grazing rights and cattle-rustling have frequently occurred (Sundberg, Eck and Kreutz 2012; UCDP 2014).

Table 4.2: States with most counts of non-state conflicts, 1989-2008

State	Counts	Fatalities
Somalia	75	9331
Ethiopia	54	6034
Sudan	52	12832
Kenya	43	2593
Congo, Democratic Republic of	32	11652
Uganda	24	1800
Afghanistan	22	1561
India	21	4275

Note: The number of occurrences in Kenya, Uganda and Ethiopia is in reality slightly smaller. Duplicated observations are found in Appendix B, Table A.1. Source: UCDP non-state conflict data set (Sundberg, Eck and Kreutz 2012)

My theoretical framework has not put an emphasis on the potential difference between these three categories. The criterion that defines non-state conflict in my thesis is solely the lack of government as one of the fighting parties. This means that the actors I include will differ with organization level as well as how member affiliate with the group. One potential pitfall with this approach is the lack of coherency across cases. If the included observations do not fit the theoretical framework, inferences from models will not be valid.

Table 4.3: Yearly fatalities by type of organization, 1989-2008

Organization Level	Mean	Std. Dev.	Min.	Max	N
Communal groups	149	311	25	3051	295
Political parties	214	253	25	899	25
Rebel groups	156	304	25	2732	235
All levels	155	305	25	3051	555

Source: UCDP non-state conflict dataset (Sundberg, Eck and Kreutz 2012)

The theoretical expectations put forth here, suggest the same relationship across all UCDP's three categories of non-state conflicts. Since the theoretical expectations are the same across categories, this creates coherency in the models. Although expectations take the same direction, there are also some potential disadvantages with joining the categories. The magnitude of the different explanatory variables might differ across categories. By adding categories, nuances will be lost when only the joint are reported. Due to this, I will run a joint model which include all types of non-state conflicts as well as separate models for the rebel and communal category. Due to the low number of observations in conflicts between political parties, a separate model for this category is not possible to estimate. However, these observations will be included in the joint model.

Table 4.4: Sample of non-state conflicts, 1989-2008

Side A	Side B	Statename	Year	Org.	Fatalities
Dayaks	Madurese, Malays	Indonesia	1999	Com	172
Hezbollah (Party of God)	SLA (South Lebanon Army)	Lebanon	1992	Reb	30
Juarez Cartel	Sinaloa Cartel	Mexico	2008	Reb	294
Fulani	Tarok	Nigeria	2004	Com	1223
Jam'iyyat-i Islami-yi Afgh.	Mahaz-i Milli-yi Islami-yi Afgh.	Afghanistan	1996	Reb	100
ANC 'Greens' faction	ANC 'Reds' Faction	South Africa	1993	Reb	30
Ahlu Sunna Waljamaca	Tijuana Cartel - El Teo faction	Somalia	2008	Com	38
Kikuyu	Maasai	Kenya	1993	Com	39
Supporters of ANC	Supporters of IFP	South Africa	1989	Pol	143
AUC	FARC	Colombia	1997	Reb	35
SLM/A	SLM/A - MM (Minni Minawi faction)	Sudan	2005	Reb	57
SSDF (Southern Sudan Defence Force)	SSUM/A (South Sudan United Movement/Army)	Sudan	1998	Reb	241
MTA (Mong Tai Army)	UWSA (United Wa State Army)	Myanmar (Burma)	1990	Reb	357
Republic of Croatia	Serbian Autonomous Oblast of Krajina	Serbia (Yugoslavia)	1991	Reb	189
Sa'ad subclan of Habar Gidir clan	Suleiman subclan of Habar Gidir clan	Somalia	2004	Com	156
Anuak	Nuer	Etiophia	2003	Com	36
Hizb-i-Islami-yi Afghanistan	Andani	Afghanistn	1991	Reb	51
Hells Angels	Rock Machine	Canada	1998	Reb	27
Republic of Abkhazia	White Legion (t'et'ri legioni)	Georgia	1997	Reb	26
MTA (Mong Tai Army)	UWSA (United Wa State Army)	Myamar (Burma)	1990	Reb	357
Hindus (India)	Muslims (India)	India	1989	Com	1727
Kurdish Democratic Party	Patriotic Union of Kurdistan	Iraq	1997	Reb	99
Burkinabé	Guéré	Ivory Coast	2003	Com	155
Hema	Lendu	DR Congo	2002	Com	1946
Laines	Qaqachacas	Bolivia	2000	Com	50
Hotiya Baggara	Newiba, Mahariba, Mahamid	Sudan	2005	Com	251
Comando Vermelho (Red Command)	Terceiro Comando (Third Command)	Brasil	2004	Reb	30
Forces of Amanullah Khan	Forces of Ismail Khan	Afghanistan	2002	Reb	63
Army of Salarzai tribe	Taleban Movement of Pakistan	Pakistan	2008	Reb	69
Dodotoh	Jie, Matheniko Karimojong	Uganda	2000	Com	33

Source: UCDP non-state conflict dataset (Sundberg, Eck and Kreutz 2012)

Final Operational Definition of Dependent Variable

My final operational definition of non-state conflicts is derived from UCDP’s definition of non-state conflicts as well as UCDP’s coding criteria for the observations included in the UCDP non-state conflict dataset. To recap, my operational definition of non-state conflict is: *the occurrence of armed conflict between two organized groups, neither which is the government of a state, that result in at least 25 annual deaths in a year.*

I use the information in UCDP Non-state conflict dataset to construct the dependent variables, namely *non-state conflicts* (Sundberg, Eck and Kreutz 2012). The variable counts the total sum of occurrence of non-state conflicts per country year. Nigeria had four occurrences of non-state conflicts in 1992, hence the observation Nigeria in 1992 will be 4. Originally, the data set is in a dyadic format, where each observation contains information of the dyad on a yearly basis. Besides name and year, each observation provides information about the conflict’s organization level, name of the parties involved, number of yearly fatalities, which state the conflict is located in and whether it has ended or not. From this I construct a country year data set, linking the count measure to calendar years in states. The location for some observations is set to more than one state. For these cases, I have constructed one observation for each state included. This has led to an increase from 538 to 550, adding 12 occurrences of non-state conflicts. A list of these duplicated observations can be found in Appendix A, Table A.1.

In the previous sections, I have problematized issues to the divergence between the theoretical concept of non-state conflict, and an operational definition of it. As there exist only one comprehensive dataset on non-state conflicts, UCDP’s initial coding rules and conceptualization both lead and constrain the discussion of an operational definition. While the previous section might seem unnecessary given that my theoretical concept and operational definition are identical, it has provided a more nuanced understanding of the pros and cons when the phenomena is measured quantitatively.

4.3.3 State Capacity

Within the literature, state capacity is an elusive concept that by scholars have been interpreted in various ways. As Hendrix (2010) and Fjelde and de Soysa (2009) have noted, how scholars conceptualize and measure state capacity have led to diverging inferences as scholars have used the *same* indicators as proxies for *different* concepts.

CHAPTER 4. RESEARCH DESIGN

The three most common operationalizations scholars have used for state capacity are military capacity, bureaucratic and administrative capacity and the coherence of political institutions (Hendrix 2010). The theoretical framework presented here treat state capacity and political institutions as two different aspects. While some scholars argue that state capacity is defined by the quality and coherence of political institutions (See eg. Muller and Weede 1990; Hegre et al. 2001; DeRouen and Sobek 2004), I am in the need of a measure allowing me to differentiate between political institutions and state capacity. Hence, the final measure of state capacity needs to exclude aspects that are related to the election of political leaders. Further, the framework put forth suggests the ability to govern starts with bureaucratic and administrative capacity. It is this particular aspect of state capacity capturing the essence I seek to operationalize.

To recap, hypothesis $H2$ suggests a relationship between weak bureaucratic and administrative capacity and an increase of non-state conflicts because it: (1) leads to a security dilemma for non-state actors because the state is not an actor whom groups can rely upon protection from, and (2) limits governments' ability to regulate violence and execute conflict reducing policies, *if* they choose to do so. In addition, hypothesis $H4$ suggests a conditional effect regime change by bureaucratic and administrative capacity.

The proxy I use to measure bureaucratic and administrative capacity is taken from Hegre and Nygård (2014). Their definition of bureaucratic quality corresponds to my theoretical construct as they define bureaucratic quality to be " (...) the capacity of the political systems to implement decisions through the administrative apparatus" (2014, pg. 5). Their measure of bureaucratic quality relies on two different sources of data, respectively the International Country Risk Guide/Political Risk Group (ICRG) measure of bureaucratic quality and the World Governance Indicators (WGI) measure of government effectiveness (PRG 2010; Kaufmann, Kray and Mastruzzi 2010).

ICRG's measure of bureaucratic quality is based three indicators; (1) regular, meritocratic recruitment and advancement process, (2) insulation from political pressure and (3) the ability to provide services and expertise to govern without drastic changes in policy (PRG 2010). Countries scoring low on the first indicator represent cases where state officers are recruited based on their allegiance with the governing party, and not by profession qualifications. One example is Zambia in the 1970s, where the government passed a law that excluded non-members of the ruling party to hold official positions (Bates 2008, pg. 50). The second indicator reflects to which degree the bureaucracy is immune to political pressure. If the bureaucracy becomes an apparatus where goods are channeled to relevant groups in exchange for political support, it is by no means immune to political pressure. In many African states,

clientelism is widespread, making the bureaucracy an area where the provision of state services translates into political support (Szeftel 2000). States scoring low on the last indicator represent cases where the bureaucracy collapse during political transition.

WGI measures the same concepts as ICRG, as they define government effectiveness to be: "(...) perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies." WGI uses a variety of data sources to construct their index of government effectiveness. Data from ICRG is also included. WGI use surveys and expert assessment from respondents belonging to public sector, private sector and the NGO sector. The index is based on data from more than 10 different sources (Kaufmann, Kray and Mastruzzi 2010). A full review of their source is a heroic task, which I will not proceed upon.¹⁶ Henceforth, I will only discuss issues regarding the ICRG collection as this source alone is the most important component of Hegre and Nygård (2014) index of bureaucratic quality.

The ICRG measure rely on the use of country experts in their coding. This means that each coder have in-depth knowledge about the country they report from. The lack of cross validation is then justifiable on the basis of internal validity. Further, ICRG provides each expert country expert with a scheme of questions to answer. This schema entails comparison across countries possible as experts answer the same questions regardless of country and year (PRG 2010). According to Hendrix (2010, pg. 273), survey measures of bureaucratic quality are among the most theoretical and empirically justified approaches to measuring state capacity. However, there are some issues with this method of collecting data that needs to be addressed. The use of expert assessments in collecting data will inherently be subjective, as each expert must individually analyze and interpret situations (Neumayer 2004). For a scientific ideal of objectivity, expert assessments will always score low. One additional problem with the ICRG measure, is the potential divergence between when something happens and when it is observed. Coders often rely on public sources, leading to a potential delay in coding if reporters can not get hold of information. There are also cases when regime resist to give information as public display could have unwanted consequences (Linder, Santiso and Neumann 2002).

There are many advantages with using the Hegre and Nygård (2014) index of bureaucratic quality as a proxy of state weakness. In his review and assessment of state capacity, Hendrix (2010, pg. 283) finds the ICRG measure of bureaucratic quality as a satisfactory measure

¹⁶For more information, see <http://info.worldbank.org/governance/wgi/>

when considering construct validity. Bureaucratic quality correlates highly with rational legality, which Hendrix find to be one among three underlying dimension of state capacity.¹⁷ In addition, the Hegre and Nygård index of bureaucratic quality correlates with other well know measures of related to state capacity. One example is their rule of law index which correlates with the bureaucratic quality index by 0.874.¹⁸ From a perspective of face validity, I would argue that measure subjectively provides a strong link to the theoretical construct as they are nearly identical.

Using the data from Hegre and Nygård (2014) I operationalize the variable, *bureaucratic quality*. The variable is a normalized continuous scale ranging from a minimum of -2.44 to a maximum of 2.51. High scores are given to states where the governing body easily can implement its decisions. This measure highly reflects the theoretical construct of bureaucratic and administrative state capacity.

4.3.4 Representative Political Institutions

Within political science, scholars use different labels to classify political regimes. For some scholars distinctions are clear cut, regime are either democratic or non-democratic (See eg. Huntington 1991; Alvarez, Cheibub, Limongi and Przeworski 1996; Przeworski, Alvarez, Cheibub and Limongi 1996; Przeworski et al. 2000; Cheibub, Gandhi and Vreeland 2010). Other scholars see democracy as a continuum, where political regimes to a more or less extent are democratic (See eg. Bollen 1993; Vanhanen 1990). Once settled for either a dichotomous or continuous definition, the chosen indicator must also be addressed. While different measures of political regimes tend to highly correlate, it should not automatically be taken as an evidence of validity, as choice of democracy measure could lead to different results (Casper and Tufis 2003; Högstrom 2013). While there exist a variety of indicators measuring democracy, the final choice should be guided by the theoretical underpinning.

My framework has put an emphasis on how formal political institutions create incentives for leaders to (1) form policies addressed at reducing grievance and (2) act as neutral mediators when tension rise. I would argue that a continuous measure of democracy is best suited given my theoretic framework. A simplification of political regimes into either democracy or autocracy would potentially dismiss variations in incentives to regulate. One dichotomous

¹⁷Hendrix review is based on a factor analysis of 15 measures of state capacity. The other two dimensions are rentier-autocrticness and neopartimonality.

¹⁸This correlation is reported in the online appendix belonging to their study on "Governance and Conflict Relapse" (Hegre and Nygård 2014).

alternative is the Alvarez et al. index of democracy and dictatorship.¹⁹ For a regime to be categorized as a democracy, it has to pass four coding rules.²⁰ For example is Botswana, a country considered by many scholars as a democracy, is recorded as a dictatorship. This is problematic, as stated in the words of Collier and Adcock (1999, pg. 549) "(...) in our view it remain unclear why a regime that has competitive elections for the presidency, rotation in the presidential office, and more than one party - but lacks competition for legislative office, is not at least partially democratic."

To recap, my definition of political regimes focus solely on representative institutions. I have defined the concept to be: institutions where the executive power is elected by a majority or a plurality of the population in an open recruitment process and that there exist constraints on executive powers by an elected legislative. This definition is based on three dimensions related to the overarching concept of democracy: executive recruitment, executive constraints and participation.

There exist many continuous measures of political regimes including the three aspects. One example is the Freedom House Index (FHI) which include measure of participation (FHI 2014). While the FHI index might enjoy great face validity, as it embraces a broader specter of meanings and understanding associated with the overarching term democracy, it is dismissed because of its broadness. Consequently, using the FHI index would lead to a situation where I am able to distinguish the effect of formal institutions from other aspects. A measure that lies closer to my theoretical concept is Marshall, Gurr and Jagers (2010) widely used Polity Index. It is a continuous scale that characterizing political regime among the three dimensions I have included in my definition. There is one problem with the Polity Index. The sub-indicator measuring participation has an explicit reference to political violence in its coding rules (Gleditsch, Hegre and Strand 2009; Vreeland 2008). Non-state conflicts could potential then be captured in this indicator, making the index inappropriate. However, the Polity index is not completely dismissed, as the usefulness of the data lies in its components.

To proxy representative institutions, I use the Scalar Index of Policies (SIP) developed by Gates et al. (2006). The index compress a three-dimensional conceptualization of democracy to one dimension. The SIP index combines data from the Polity Index, but replaces the measure of participation with the Vanhanen (2000) data on participation. The index is based

¹⁹This index is often referred ACLP index after the authors' initials, or the DD index based on the distinction between democracy and dictatorship.

²⁰These are: (1) The chief executive must be chosen by popular election or by a body that was popular elected, (2) the legislature must be popular elected, (2) there must be more than one party competing in elections and (4) An alteration in power under electoral rules identical to the ones that brought the incumbent to office must have taken place (Alvarez et al. 1996, pg. 69).

CHAPTER 4. RESEARCH DESIGN

on an average score of the three dimensions of representative institutions I have addressed. It ranges from zero to one, where one equals perfect democracy and zero equal perfect autocracy.

The SIP index operationalize executive recruitment based on three sub-indicators from the Polity IV dataset.²¹ The three sub-indicators assess structural characteristics relating to chief recruitment. The first looks at the degree of institutionalization in the succession of power, from one executive to another. If regulated and institutionalized, succession happens through scheduled competitive elections. If not regulated, succession happens through violent seizures, appointment from a tiny elite or an election where voting rights are limited. The second indicator measures to which extent there exist equal opportunities for candidates to challenge the governing body. For a minimum of equal opportunities to exist, succession must happen through an election with at least two competing parties. This disqualifies one-party systems, monarchies and designation by selection. The last sub-indicator also reflects candidates' opportunities, whereas this measure captures whether there in principle exists an opportunity of attaining political leadership through a regularized process. In this case, solely elections qualifies.

The indicator of executive constraints reflects to which degree the executive enjoys unlimited authority or not.²² When leaders have unlimited authority, they either ignore constraining bodies or there does not exist any constraining bodies. In the opposite case, leaders actions are restricted by an elected legislative who have the powers to dismiss leaders. The indicator also record intermediate categories. Such an example is Peru in 1992, where Polity record the execute to have some restrictions on authority, but still not unlimited. In this year, President Fujimore dissolved Congress, reorganized the judiciary and suspended the constitution (Strong 1992).

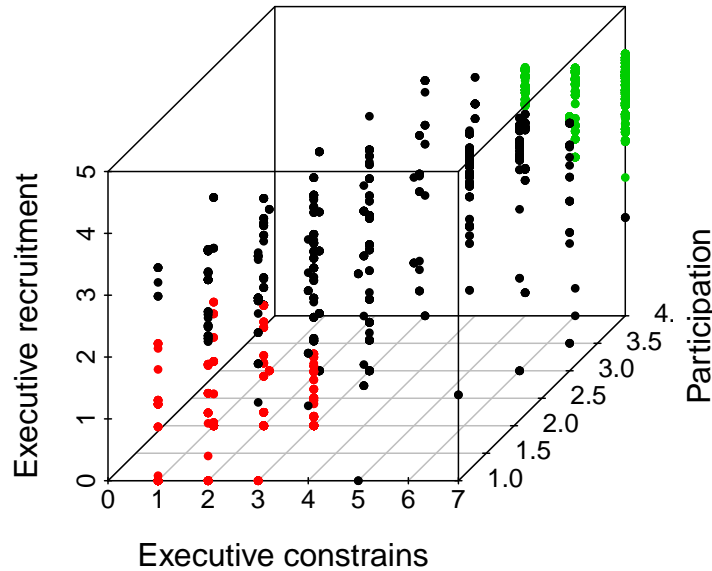
The last indicator, participation, is operationalized by combining two sub-indicators from the Polyarchy dataset by Vanhanen (2000). The first one, participation, is the percentage of the population voting in an election. The second one, competition, is the percentage of valid votes won by all parties except the plurality winner or the winning coalition. If a successful coup follows the election, both indicators are coded as zero. The product of these two sub-indicators constitute Gates et al. (2006) measure of participation in the SIP index.²³

²¹Within the Polity IV dataset, these variables carry the names: XRREG (Regulation of Chief Executive Recruitment), XCOMP (Competitiveness of Executive Recruitment) and XROPEN (Openness of Executive Recruitment) (Marshall, Gurr and Jaggers 2010)

²²The name of the variable is XCONST (Executive constrains) in the Polity IV dataset (Marshall, Gurr and Jaggers 2010).

²³In order to compensate for the possibility that regimes with that have high levels of competition and high levels of participation are given to much leverage, the coding rules are adjust for state where competition exceeds 70%. If the level of participation exceeds 70%, participation is multiplied by competition divided by

Figure 4.3: Authority dimension and ideal polity types, 1989-2008



Note: Ideal autocracy in the lower left corner. Ideal democracy in the upper right corner. Points in red are autocracies, black anocracies and green democracies.

Source: Strand et al. (2012)

I use the information in the SIP index to construct the variable, *regime type*. The SIP index is taken from Strand, Hegre, Gates and Dahl (2012). The index is a continuous scale that range from 0 to 1 where 0 represents an ideal autocracy and 1 an ideal democracy. For the missing values on the SIP index, I used the previous regimes score. From Figure 4.3 we can see the relationship proposed by Gates et al. (2006). Democracies and autocracies tend to have high or low score on all the dimensions whereas anocracies vary much more.

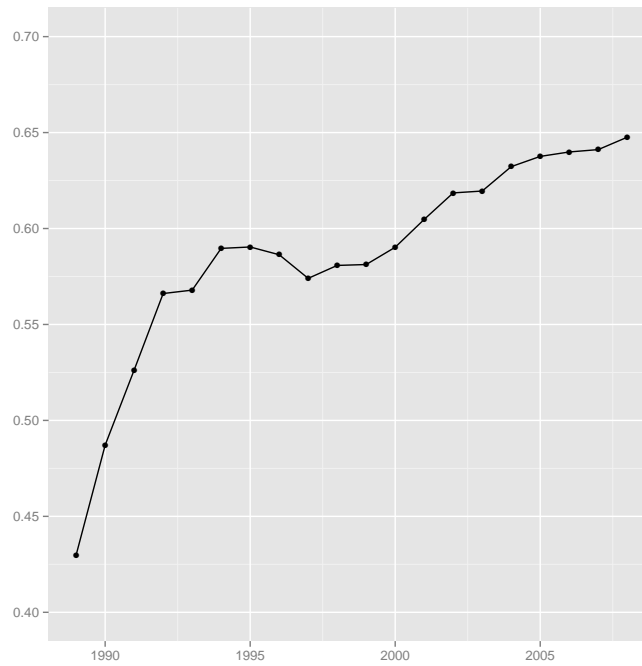
4.3.5 Regime Change

To enable an assessment on the effects of regime change, one needs to start with how to identify periods of change. As regime change in reality is a continuous process, identifying it in a quantitative matter will decompose the phenomena to a latent variable. This means

30%. For two states with an identical participation of 80%, but with respectively low and a high winning coalition (for example 30% and 70%), the first state would have appeared to much less democratic than the latter. This corrects for to which extent an election has an decisive impact on the selection of executive (Gates et al. 2006, pg. 898).

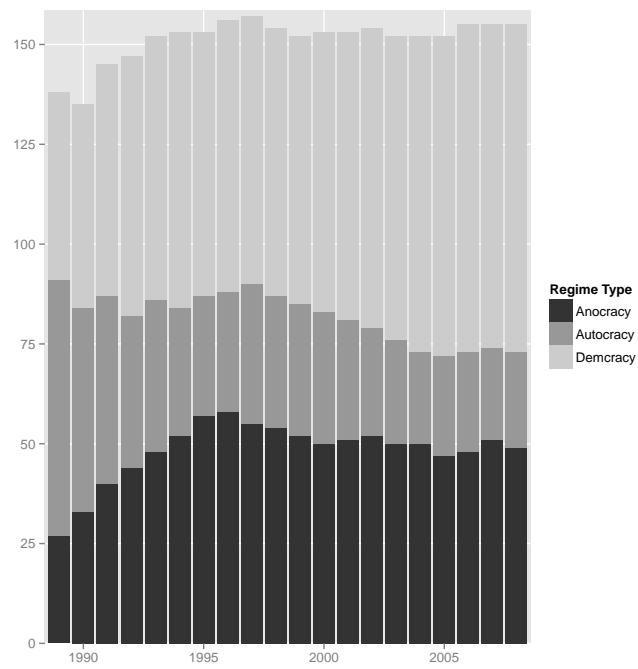
CHAPTER 4. RESEARCH DESIGN

Figure 4.4: Trends in political regimes: global average SIP score, 1989-2008,



Source: Strand et al. (2012)

Figure 4.5: Trends in regime types: frequency share, 1989-2008,



Source: Strand et al. (2012)

that the coding rules applied to operationalize regime change will determine when regime change is a phenomena we observe. From Gates et al. (2006) we know that political changes are more common in anocracies than democracies and autocracies. In addition, Hegre et al. (2001) find that the consolidation of regimes affect how prone they are to change. Proximity to change affects change. Somehow, the indicator of regime change needs to incorporate these two issues.

Within the literature, regime change is most commonly measured as the year to year comparison of the Polity Index with values (Cederman, Hug and Krebs 2010, pg. 379).²⁴ For example, Gleditsch and Ward (2000) and Mansfield and Snyder (2005) identify change by comparing variations along the autocracy-democracy dimension within respectively five or ten years. Other scholars use a combination of periodical change and net change from proceeding years. These scholars measure political change as either two points divergence from proceeding score on the Polity index or as a total change of three points in the three previous years. (See eg. Hegre et al. 2001; Fearon and Laitin 2003). An additional approach is done by identifying stable and unstable periods (the periods themselves are not fixed), where divergencies from the stable period is operationalized as regime change (See eg. Cederman, Hug and Krebs 2010).

I have opted for the SIP data from Strand et al. (2012) as indicator of regime changes. Since the SIP index is based on sub-indicators from the Polity data, Polity's initial coding rules affects the SIP index. Table 4.5 displays a comparison of the Polity index and the SIP index for Somalia, Afghanistan and Peru. The Polity Index spans from -10 to 10, where low values are given to autocratic regimes and high values to democratic regimes. In Polity's coding rules, there are three values used to indicate situations that are somewhat special. The first one is *interruption* (-66) periods where the polity is occupied by foreign powers terminating the old regime and establishing a new one. The second is *interregnum* (-77) periods, identified by a complete collapse of central political authority. In the height of civil war, this is often the case. The third one is *transition* (-88) periods where new institutions are planned, legally constituted, but not put into effect (Jaggers, Gurr and Marshall 2012, pg. 19).²⁵ In the SIP index, these special periods are treated as *missing values*.

²⁴This means that a $Regime\ change_t$ is operationalized as the difference between two regimes at $Regime_{t-1}$ and $Regime_t$.

²⁵In the time period from 1989 to 2008, the Polity Index have recorded a total of 167 of these special cases. With a total record of 3234 polities from 1989 to 2008, these cases constitute 5.2% of the recorded data in the period. Respectively, there are 45 cases of Interruption Period (-66), 63 cases of Interregnum Periods (-77) and 59 cases of Transition Periods (-88). There respective shares are 1.4%, 1.9% and 1.8% (Jaggers, Gurr and Marshall 2012).

CHAPTER 4. RESEARCH DESIGN

Table 4.5: Polity Index and SIP index: sample values from Afghanistan, Somalia and Peru, 1989-2008

Year	SIP Afg.	PI Afg.	SIP Som.	PI Som.	SIP Peru	PI Peru
1989	0.06	-8	0.00	-7	0.85	7
1990	0.06	-8	0.00	-7	0.85	8
1991	0.06	-8	NA	-77	0.85	8
1992	NA	-77	NA	-77	0.48	-3
1993	NA	-77	NA	-77	0.48	1
1994	NA	-77	NA	-77	0.48	1
1995	NA	-77	NA	-77	0.48	1
1996	0.00	-7	NA	-77	0.48	1
1997	0.00	-7	NA	-77	0.48	1
1998	0.00	-7	NA	-77	0.48	1
1999	0.00	-7	NA	-77	0.48	1
2000	0.00	-7	NA	-77	NA	-88
2001	NA	-66	NA	-77	0.94	9
2002	NA	-66	NA	-77	0.94	9
2003	NA	-66	NA	-77	0.94	9
2004	NA	-66	NA	-77	0.94	9
2005	NA	-66	NA	-77	0.94	9
2006	NA	-66	NA	-77	0.94	9
2007	NA	-66	NA	-77	0.94	9
2008	NA	-66	NA	-77	0.94	9

Source: Scalar Index of Policies (Strand et al. 2012) and Polity Index (Jaggers, Gurr and Marshall 2012)

Note: -66 is interruption periods, -77 is interregnum periods and -88 is transition periods. NA (Not Available) is missing values.

While the SIP index records these periods as missing observations, the phenomenon they identify is what I will refer to as *state collapse*. For the interruption and transition values, these are periods that reflect the phenomena I seek to investigate. For the interregnum values, some elaboration is needed. They could be interpreted as transition periods or they could be interpreted as state collapse. Plumper and Neumayer (2010) label this the "interregnum problem", as scholars have to decide what to do with longer periods lacking central authority when they operationalize regime change. Gleditsch and Ruggeri (2010, pg. 47) have dealt with this problem by replacing the interregnum values by using alternative data sources like the Freedom House Index. They often find that the interregnum periods lie close to a score of -10 on the Polity Index, reflecting an autocratic situation. Consequently, they assign the value -10 to interregnum periods. Other scholars assign the neutral Polity score of 0 to the interregnum periods.²⁶ In their study of civil war onset, Fearon and Laitin (2003) opt for this strategy when they measure regime change. Plumper and Neumayer (2010) criticize this approach by drawing an example from Afghanistan. Before the civil war broke out in 1992,

²⁶This modification is often referred to as the Polity2 Index (Jaggers, Gurr and Marshall 2012, pg. 17)

Afghanistan was assigned values close to the bottom of the Polity Index. By replacing the interregnum scores with neutral values, Afghanistan seems more democratic during the civil war, than in the periods before and after the war. This is obviously wrong as Afghanistan during the war did not portray a more democratic situation. One final way to deal with the interregnum periods is to exclusively treat them as transitional periods.

In the previous chapter, regime change was defined to be a period between two different polities with different institutional structures. This leads to the potential of *long* transition periods if change in political structures is not immediately replaced by new political structures. The consequence of approaching regime change in this way will lead to a blurry line between what we think of as state collapse and regime change. Somalia serve as an example of this situation. Since the fall of the Barre regime in 1991, Somalia has been without a governing body. One could argue that Somalia changed in 1991 and the situation afterwards is a period of state collapse. This way of arguing leads to a stable "unstable" situation since 1991. Given my theoretic framework, I will treat these long periods with lack of central authority as transition periods.

In the theoretical framework, one of the mechanisms connected to hypothesis *H3a* is how reorganization of state structures, leads to a lack of state-based security. In the case of long transitional periods, either due to lack or the evaporation of state structure, the security dilemma is by no means solved by state agents. These long situations capture the essence of the theoretical expectations regarding regulation of violence and non-state conflicts. In the anarchial setting of a state collapse, groups have to rely on privately supplied protection instead of state-based. This leads me to interpret the lack of central authority as transitional periods. Hence, the case of Somalia from 1991 and onwards, is a transitional period.

Given the theoretic underpinning, I will argue that *all* missing values on the SIP index, caused by the special values in the Polity Index, represent a type of transition period. Or in the words of Cederman, Hug and Krebs (2010, pg. 47) "(...) they respectively represent conditions of anarchy, foreign interruption or regime change, they all reflect conditions where the political process have been severely disrupted." Consequently, the missing values on the SIP index are interpreted as transitional periods in my analysis. The variable, *State Collapse* is a dummy variable indicating whether the SIP index has missing values. Table 4.6 shows the relationship between the original SIP index and my measure of *state collapse*.

The data from Strand et al. (2012) also has an indicator denoting regime change. By regime change, they use the definition from Gates et al. (2006, pg. 898):

"A polity change is defined as any change in indicators that results in one or more

of the following: (1) a movement from one category to another in the Executive dimension, (2) a change of at least two units in the Executive Constraints dimension, or (3) a 100% increase or 50% decrease in the Participation dimension. Doubling the number of citizens with voting rights qualifies as a minimum change along the Participation dimension. The creation or dissolution of states is also defined as a polity change.”

The indicator of change takes the value of -1 or 1 depending on whether there is a transition towards autocracy or democracy.²⁷ Compared to the *state collapse* variable, this indicator does not record the ”unstable” stable period with a lack of central authority as change. Consequently, it has less observations than the *state collapse* variable. Another reason for applying a more strict measure of regime change is that it allows me to discriminate the effect of state collapse from regime change. This makes me able to test the expectations derived from Hypothesis *H3b*, *H3c* and *H3d*. From this indicator I construct three dummy variables, *democratization*, *autocratization* and *regime change*. The variable *regime change* is the joint effect of autocratization and democratization, and is used to capture whether change per se bring non-state conflicts. The other two indicators incorporate the direction of change as well.

²⁷In the dataset this variable is named sip2status.

Table 4.6: Operationalization of regime changes, sample from Peru and Afghanistan

Year	State	SIP	SIP con	SC	TS SC	Hal. SC	Status	Auto	TS Auto	Half. Auto
1989	Peru	0.85	0.85	0.00	9.00	0.00	0.00	0.00	11.00	0.00
1990	Peru	0.85	0.85	0.00	10.00	0.00	0.00	0.00	12.00	0.00
1991	Peru	0.85	0.85	0.00	11.00	0.00	0.00	0.00	13.00	0.00
1992	Peru	0.48	0.48	1.00	0.00	1.00	-1.00	1.00	0.00	1.00
1993	Peru	0.48	0.48	0.00	1.00	0.50	0.00	0.00	1.00	0.50
1994	Peru	0.48	0.48	0.00	2.00	0.25	0.00	0.00	2.00	0.25
1995	Peru	0.48	0.48	0.00	3.00	0.12	0.00	0.00	3.00	0.12
1996	Peru	0.48	0.48	0.00	4.00	0.06	0.00	0.00	4.00	0.06
1997	Peru	0.48	0.48	0.00	5.00	0.03	0.00	0.00	5.00	0.03
1998	Peru	0.48	0.48	0.00	6.00	0.02	0.00	0.00	6.00	0.02
1999	Peru	0.48	0.48	0.00	7.00	0.01	0.00	0.00	7.00	0.01
2000	Peru	NA	0.48	1.00	0.00	1.00	-1.00	1.00	0.00	1.00
2001	Peru	0.94	0.94	1.00	0.00	1.00	1.00	0.00	1.00	0.50
2002	Peru	0.94	0.94	0.00	1.00	0.50	0.00	0.00	2.00	0.25
2003	Peru	0.94	0.94	0.00	2.00	0.25	0.00	0.00	3.00	0.12
2004	Peru	0.94	0.94	0.00	3.00	0.12	0.00	0.00	4.00	0.06
1989	Afghanistan	0.06	0.06	1.00	0.00	1.00	1.00	0.00	11.00	0.00
1990	Afghanistan	0.06	0.06	0.00	1.00	0.50	0.00	0.00	12.00	0.00
1991	Afghanistan	0.06	0.06	0.00	2.00	0.25	0.00	0.00	13.00	0.00
1992	Afghanistan	NA	0.06	1.00	0.00	1.00	-1.00	1.00	0.00	1.00
1993	Afghanistan	NA	0.06	1.00	0.00	1.00	0.00	0.00	1.00	0.50
1994	Afghanistan	NA	0.06	1.00	0.00	1.00	0.00	0.00	2.00	0.25
1995	Afghanistan	NA	0.06	1.00	0.00	1.00	0.00	0.00	3.00	0.12
1996	Afghanistan	0.00	0.00	1.00	0.00	1.00	1.00	0.00	4.00	0.06
1997	Afghanistan	0.00	0.00	0.00	1.00	0.50	0.00	0.00	5.00	0.03
1998	Afghanistan	0.00	0.00	0.00	2.00	0.25	0.00	0.00	6.00	0.02
1999	Afghanistan	0.00	0.00	0.00	3.00	0.12	0.00	0.00	7.00	0.01
2000	Afghanistan	0.00	0.00	0.00	4.00	0.06	0.00	0.00	8.00	0.00
2001	Afghanistan	NA	0.00	1.00	0.00	1.00	-1.00	1.00	0.00	1.00
2002	Afghanistan	NA	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.50
2003	Afghanistan	NA	0.00	1.00	0.00	1.00	0.00	0.00	2.00	0.25
2004	Afghanistan	NA	0.00	1.00	0.00	1.00	0.00	0.00	3.00	0.12

Note: SC = State collapse, TS= Time since, SC TC= Time since state collapse, Half SC= Halftime State collapse

Source: Scalar Index of Policies (Strand et al. 2012)

In their analysis of civil war, Hegre et al. (2001) find that the proximity to change increases the potential of change. To account for consolidation on the potential of change, I have included a decay function as an alternative specification to regime changes. This specification models the effect of regime change according to how long it has been since the last recorded change. The data on non-state conflicts start in 1989, but the SIP index record values back to the 1800s. In order to avoid the decay function to start with equal values for observations in 1989 I have left censored SIP data. To operationalize the decay functions, I start by constructing a variable counting the number of years since last change. USA is the state included with the longest period without regime change prior to 1989. USA enters the dataset in 1989 with 165 years since the last regime change.

Since the effect of change is biggest the closer to the observed change, I model it as an exponential decay processes. The decay variables for each type of regime change are the half-time functions since last recorded change. By halftime I mean how long it takes to reach one half of the final value, where the rate of change is proportional to the difference between the present value and the final value.²⁸ I use the time of one year (12 months) to model the effect of consolidation, since bigger halftime values potentially could alter estimations in the analysis, giving the effect of regime change unrealistic leverage. Table 4.6 shows a sample of how this function is operationalized for their indicator of *state collapse* and *autocratization*.²⁹

Figure 4.6 provides an example of how the halftime function is operationalized for Peru. Peru is record with change on the indicator of *state collapse* between 1989 and 2000. For a halftime of one year, the effect of regime change is halved after one year. After four years, a half time of one year, leads to the effect of 0.25. The figure also illustrates how the assumptions about halftime leads to how much leverage I am willing to give the decay of regime change in my analysis. When the halftime is set to four years, regime change will have a huge impact on the estimations of conflict risk. In order to avoid an exaggeration on the effect of regime change on conflict, I have opted for a halftime of one year.

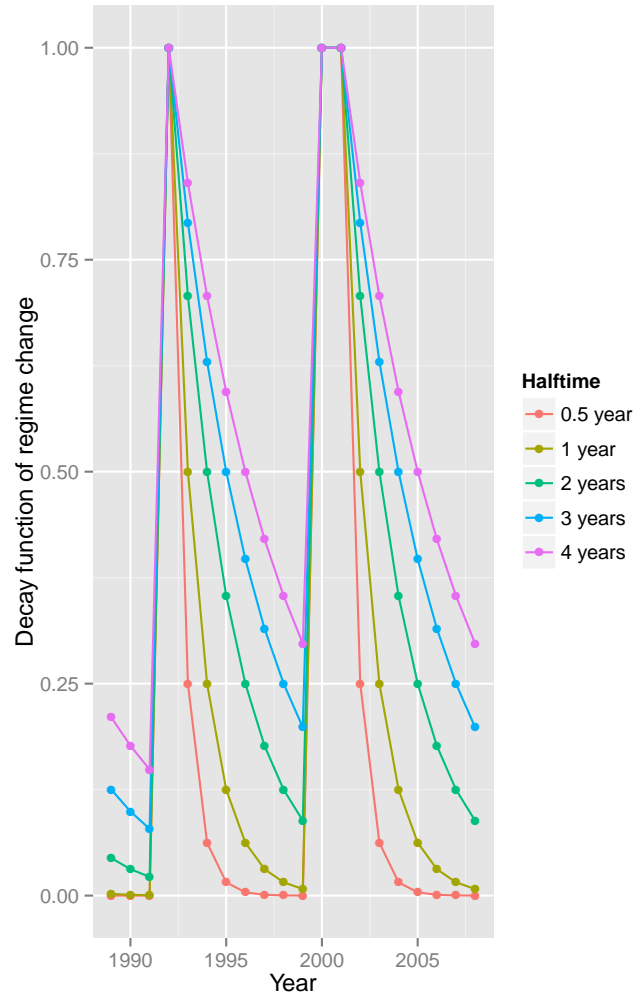
4.3.6 Conditional Effects

Several scholars have suggested that a well functioning bureaucracy makes transition periods more easily accomplished. Removal of an unpopular leader and transition to a more open

²⁸The exponential rate of change is $N(t) = N_0 e^{-\lambda t}$, where $N(t)$ is the quantity at time t and N_0 is the initial quantity at time $t = 0$.

²⁹The last two indicator of regime changes, *regime change* and *democratization* are operationalized by the same procedure and are not reported in the table.

Figure 4.6: Decay functions of regime change, Peru



regime are more easily accomplished within the frame of a strong bureaucracy (Goodwin and Skocpol 1989; Schock 1996; DeRouen and Sobek 2004). This suggests that the effect of regime change on the increase of non-state conflicts is mediated, hence conditional, upon bureaucratic and administrative state capacity. If the effect of regime change is conditioned upon state capacity, an analysis omitting an interaction term would prevail a less nuanced relationship or even a source of omitted variable bias.

Scholars have been criticized for scholars using interaction terms in regression models. This is largely due to the difficulty with interpreting these terms. In particular, this applies to logistic models, where the relationship between the covariates and the dependent is non-linear. However, I would argue omitting an interaction term is a bad solution, especially if the relationship could be conditional. Failing to include an interaction term is a form

of omitted variable bias (Brambor, Clark and Golder 2005). While conditional estimates are hard to interpret simply by looking at estimates displayed in tables, scholars have the possibility to visualize these results in graphs and plots.

4.3.7 Control Variables

Most often, models will contain some sort of error. This is inescapable as it is impossible to include all the relevant variables in a model. Neither is a large number of controls a feasible approach, as the more correlated the main explanatory variable is with irrelevant controls, the less efficient is the estimate of the main causal effect (King, Keohane and Verba 1994, pg. 182).

I base my choice on controls by weighing two considerations. These are simply stated in the words of Schrodtt (2010, pg. 2) "(...) models must always steer between the rock of collinearity and the hard place of omitted variable bias (...)".³⁰ I seek the same approach by avoiding the inclusion of controls that either have a minimal effect on non-state conflicts or face collinearity with the explanatory variables put forth. Further I seek to avoid omitted variable bias by including controls that have proved to be robust in former studies of conflict. The controls I include are *population*, *GDP per capita*, *relevant groups* and *peace years*.

Population

Within the conflict literature, there are two explanatory factors that show consistency in nearly all studies of conflict. The first one is population size and the second one is income level. Countries that have large populations are often associated with all sorts of collective violence (Collier and Hoeffler 2004; Hegre and Sambanis 2006; Raleigh and Hegre 2009, See eg). I use data from Penn World Table to construct the variable *population*. The original values are log transformed in order to get a more normally distributed variable.

Income level

Within the broader conflict literature, the perhaps most robust finding is the one connecting poverty to collective violence. Nearly all quantitative studies find a strong relationship between low income levels and collective violence, after controlling for other explanatory

³⁰For more contributions on the same issue, see Achen (2005).

variables. While the causal path explaining this relationship is contested, GDP per capita remains the most robust predictor of conflict (Hegre and Sambanis 2006, pg. 531). There is one problem with including GDP per capita as a control variable, and this is mainly due to its correlation with the explanatory variables included. This issue is largely due to the interwoven relationship between income, political institutions and state capacity. Within the literature, there is evidence linking all these three together. Several decades ago, Lipset (1959) argued that high levels of income lead to a higher probability for states to democratize. Since then, the relationship have been confirmed in a number of studies since (Przeworski et al. 2000; Welzel and Inglehart 2006, See eg.).

My choice of including income levels as a control variable is based on weighing between two considerations. While it causes collinearity with one of the main explanatory variables, excluding the variable could lead to biased results. It is the omitted variable bias I fear the most, hence leading me to include GDP per capita as one of the control variables. The variable, *GDP per capita*, is log transformed in order to create a distribution closer to the normal distribution. The variable is taken from Penn World Tables (Heston and Aten 2012).

Number of Groups

When studying internal division within rebel movement, scholars find that multiple factions increase the risk of in-fighting (Bakke, Cunningham and Seymour 2012; Cunningham, Bakke and Seymour 2012; Cunningham 2013). This means that when the number of groups with divergent interests increases, so does the fighting between them. While these studies focus on fighting between co-ethnics and rebel movements, they suggest that the number of groups is of importance. I have chosen to control for the number of groups within states. A high number of groups also means an increase in the number of potential dyads fighting each other (Rudolfson 2013). On this basis, I included a variable, *relevant groups*, counting the number of groups within states. The data on relevant groups are taken from GROWup (2014), which has an updated version of the Ethnic Power Relations (EPR) data (Cederman, Min and Wimmer 2009). As defined by Cederman, Gleditsch and Weidmann (2010, pg. 99), a political relevant group is "(...) all ethnic groups for which at least one political organization exists that promotes an ethnically oriented agenda in the national political arena, or ethnic groups that are subject to political discrimination."

Peace Years

When dealing with cross-sectional time series data, the assumption about independence between observations are most likely to be broken. The perhaps most prominent example is how the level of income in one particular year hardly ever differ from the value in the prior or proceeding year. In my case, the occurrence of non-state conflicts in one year is likely to influence the occurrence in the following years. Beck and Tucker (1998) and Carter and Signorino (2010) argue that when scholars examine cross-section data with a binary dependent variable, they need to account for the potential of temporal dependence among observations. Failing to do so could lead to both biased results as well as imprecise results.

I use the method suggested by Carter and Signorino (2010) to deal with the problem of temporal dependency between observations. I model a cubic polynomial, based on the time since last occurrence of non-state conflict. The variables *peace years*, *peace years*², and *peace years*³.³¹ Together, these three values capture the potential time dependency between the occurrence of non-state conflicts.

4.4 Sources of Bias and Methodological Challenges

Given my framework and the data at hand, I identify four methodological challenges. In the following sections I present these as well as my approach to handle them. The first challenge concerns the causal relation between the explanatory variables and the dependent. The second address how correlations between variables could lead to a situation where differentiating between the effects becomes difficult. The third concerns omitted variable bias. The last challenge is how to handle missing values.

4.4.1 Endogeneity

One of the threats to my inference is caused by the insecurity in establishing the causal relationship between the dependent variable and the covariates. According to Hendrix (2010, pg. 278), the biggest threat when using bureaucratic quality in studies of conflict, is the endogeneity to the conflict predicted. In my case this means that a malfunctioning bureaucracy could origin from conflicts between groups. However, when explaining conflict with institutional structures, the potential of endogeneity is inescapable. Institutions could both

³¹For *Peace years*³ I divide the value by 1000.

be the cause and answer to conflicts. When drawing inference from the models, this means that the relationship establish will be more a relationship is hard to establish, as institutions both is the answer and cause of conflicts.

4.4.2 Multicollinearity

Multicollinearity becomes a problem in statistical analysis if the independent variables correlates with another independent variable. When interpreting the results, inference from the respective variables becomes difficult because the effects appear simultaneously. This makes causal inference highly uncertain. An additional problem is how multicollinearity leads to inflated standard errors. In the worst case, true hypothesis is discarded (King, Keohane and Verba 1994). Since one of my hypothesis includes an interaction term, this by itself may cause multicollinearity, hence making it difficult to discriminate the effects from one another. The conventional procedure is to treat correlations above 0.80 as a threat to inferences. Values above this threshold tend to inflate standard errors, hence increasing the potential for discarding a true hypothesis.

In order to investigate whether multi-collinearity will be an issue in my analysis, I inspect the bivariate correlations and conduct a variance of inflation test. Since none of the bivariate interaction terms have a higher correlation than 0.8 and the results from the variance of inflation test is alright, I do not find multi-collinearity a threat to the inferences in any of my models.³² A bivariate correlation matrix including all variables included is found in Appendix A, Table A.4. The variance of inflation test is found in Appendix A, Table A.5.

4.4.3 Omitted variable bias

In the Section 4.3.7, about control variables, I weighted my decision based on parsimony and the potential of omitted variable bias. While I did not justified why I chose to leave out some variables, I will do so here. In particular I will justify why I have left out civil war as a control since studies on non-state conflicts have included it (See eg Fjelde and von Uexkull 2012; Rudolfson 2013; Kreutz and Eck 2011; Fjelde and Østby 2014).

There is one simple reason why I leave out civil war in my analysis, and that is the potential of multicollinearity with the measures of regime changes. To recap, interregnum

³²The only variable giving deviation from the variance of inflation test is the peacespell variables. However, this these variables are a function of time same estimate

periods, are identified with complete collapse of central political authority. Since this situation often occurs in civil wars, including civil war as a variable would lead to a potential of multicollinearity. An example is Lebanon which between 1978 and 1986 is coded as an interregnum period in the Polity Index, or as missing in SIP index. In the words of Jagers, Gurr and Marshall (2012, pg. 19) "Lebanon between 1978 and 1986, in which factionalism, civil war and external military interventions has at times reduced the scope of the regime's central authority to a few square blocks of Beirut, is a recent example of an interregnum."

4.4.4 Missing

Missing values will always constitute a threat to researchers examining conflicts. This is of course due to the nature of conflict research itself. States destroyed by conflicts or extremely closed regimes neither have the capacity or will to report information. This means that key explanatory variables like indicators of regime type and governance tend to be missing in periods of conflict. Selection bias happens when missing is not random across units. In conflict research this is also the case as the countries that most often experience conflicts tend to have missing data (King, Keohane and Verba 1994; Honaker and King 2010).

There is one potential problem with missing data in my analysis. When using different coding rules as inclusion criterion for observations, there becomes a lack of coherence across datasets. Since the data on representative institutions and regime change constitute my main explanatory variables, I have chosen to apply their inclusion criterion. This means that states that do not correspond to the countries found in the SIP index will be left out of the analysis. The observed states in the data from Strand et al. (2012) is based on an updated version of states recognized to the criteria of Gleditsch and Ward (1999). I have used data sources that do not rely on this system, like the data from GROWup (2014) and Penn World Tables Heston and Aten (2012). For these sources, I have corrected for the potential coding errors arising between differences between datasets in the country codes for some countries. The SIP index record a number of 159 states from 1989-2008.³³

My data is left with a final number of 150 states.³⁴ This leads to some selection bias since some states are left out. When looking more closely into the states missed out, the break up of Yugoslavia seems as an example. The data sources I have chosen differ widely on

³³When identifying the number of unique number of states (gwno - code), the SIP index from Strand et al. (2012) records 168 states. This is in reality not the exact number since 9 of these countries have no observations. These are Bahamas, Belize, Malta, Bosnia, Cap Verde and Brunei.

³⁴A list of all the countries included could be found in the Appendix.

their approach to the break up of Yugoslavia in 1991. Some stop coding Yugoslavia and start coding Macedonia, Serbia, Croatia and Bosnia-Herzegovina. Others continue to code Yugoslavia (Serbia) on the basis that intuitions in the Serbian part of Yugoslavia did not change. This means that there is some selection bias due to different coding rules and these tend to be the case where states dissolve and new ones emerge. These lack data on population and income level.

After the merging of different data sources, I am left with a total of 3014 observations. Among these observations, there are 110 cases of missing values. These 100 cases are due to either missing on the *GDP per capita* or the *population* variable or due to the lagging of the regime change.³⁵ In total they constitute only 3.6% of 3014 observations. I consider this a threat of minor size, hence I will not take any action upon these missing values. They will be left out by listwise deletion. Table 4.7 displays the descriptive statistic for the data I will use in the analysis. The dataset covers a total of 2904 observations distributed on 150 states in the time periods from 1989-2008.

4.5 Summary

In this chapter I have developed the research design to test the hypothesis put forth in the previous chapter. It bridges the gap between theory and analysis. From the sources and indicators I have chosen, I construct a cross country data set spanning from 1989-2008. The rather short time period is due to a compromise between available data from UCDP and updated data from other sources.³⁶ After operationalizing the theoretical constructs, I am left with a dataset covering 2904 observations in 151 different states. Within this there is a total count of 550 non-state conflicts distributed over 265 country years. Table 4.7 displays the descriptive statistic for explanatory variables included.

Given the data at hand, what are the prospects for generalization? Former large N analysis of non-state violence have limited their samples to a regional scope like Sub Saharan Africa. I will not limit my analysis to be confined by regional. This means that the theories put forward here are suited for a global sample. Compared to Europe, Africa is well-known for its share of disintegrated and fractious states. Does this mean that the mechanism creating violence between groups are different in African than European states? I would argue that the mechanisms put forth in this thesis are not restricted to a global sample. This suggests

³⁵Statistics for missing data is reported in table A.2 in Appendix A

³⁶UCDP record non-state conflicts from 1989-2011

Table 4.7: Descriptive statistics

Variable	N	Mean	Std. Dev	Min.	Max.
Representative Institutions	2904	0.58	0.35	0.00	0.98
State Collapse	2904	0.11	0.32	0.00	1.00
Regime Change	2904	0.09	0.28	0.00	1.00
Democratization	2904	0.06	0.23	0.00	1.00
Autocratization	2904	0.03	0.17	0.00	1.00
Bureaucratic Quality	2904	0.05	1.01	-2.44	2.51
Log GDP per cap	2904	8.35	1.35	4.82	10.92
Log Population total	2904	9.29	1.45	5.86	14.09
Relevant Groups	2904	4.24	5.59	0.00	49.00
Peace Years	2904	7.56	5.86	0.00	19.00

Source: Strand et al. (2012); Heston and Aten (2012); Hegre and Nygård (2014); GROWup (2014)

that the hypothetical situation of a government with strong state capacity in Africa would have resulted in a lower risk of non-state in Africa. The same hypothetical situation applies to Europe. If Scandinavia were to be recognized by low state capacity, Scandinavia would be a place where we expected more non-state violence to erupt. This is plausible to believe and it justifies a global application of the theories put forth.

Chapter 5

Results

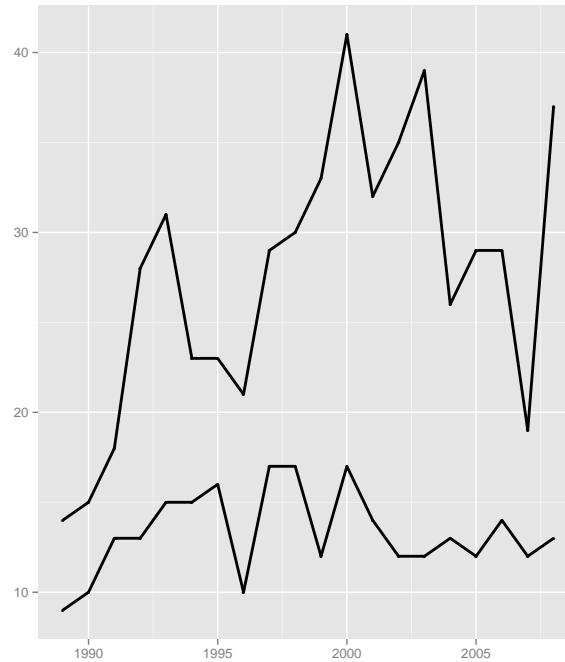
The expectations derived from the previous chapters are that state attributes like representative institutions and bureaucratic quality affect states' incentives and capacity to regulate violence. Thus, in states lacking both, we would expect non-states conflicts to occur more frequently. Further, I have put forth a set of hypotheses regarding the relationship between regime change and non-state conflicts as well as how the effect of changes are expected to be conditional upon bureaucratic quality. The objective of this chapter is to test these proposition. I will start off by presenting some bivariate statistics before I proceed to the results from the multivariate analysis. The patterns emerging give support to the expectations regarding bureaucratic and administrative state capacity. Regime change, when incorporating state collapse, is also a strong predictor of non-state conflicts. Based on results from the analysis I develop scenarios where I discuss in greater detail the patterns emerging.

5.1 Descriptive Statistics

Before turning to the results, I will start by looking at the bivariate relationship between my dependent variable and the explanatory variables. The bivariate relations found here should be interpreted with caution as they obviously could be due to a third factor. However, a bivariate examination will often detect major tendencies as well as provide preliminary evidence regarding the hypothesis.

Figure 5.1 shows the global trend in non-state conflict from 1989-2008. The upper line is the annual sum of non-state conflicts by the count dependent variable. The lower line is the number of observations, or country years with non-state conflicts. While there seems to be

Figure 5.1: Trends in non-state conflicts, counts and country years, 1989-2008



an increase in non-state conflicts from 1989 and onwards, this increase might as well be due to the start of recording than an actual increase. As some conflicts tend to span for several year whereas other end the same year they started, the increase from 1989 becomes rather natural. Although it remains just a speculation, the emergence of Europe's new democracies after the collapse of the Soviet Union could also be part of the explanation. As regime changes often is associated with conflicts of interest, social unrest and political violence, the major political alterations after 1989 could be associated with this increase. To summarize, whether non-state conflicts is a time trend remains highly insecure as the time series is quite short and annual observations and counts tend to fluctuate.¹

Representative Institutions

According to Hypothesis *H1*, we would expect states with representative institution to have less non-state conflicts because democratically elected leaders should have more incentives to reduce tension and grievance between groups.

Figure 5.2 shows how the variable *representative institutions* is distributed over the observations of non-state conflicts. Just by looking at this plot, non-state conflicts are apparently

¹The some relationship is somewhat also portrayed in the number of annual fatalities found in Figure 4.2.

phenomena that occur in both states with representative institutions and states without. There is no clear tendency for non-state conflicts to be associated with low levels of representative institution. From the theoretical expectation, the majority of the dots crossing the threshold of one annual count should have been in lower right part of the plot. Judging by this plot, the actual occurrences of non-state conflicts are just as common in states with representative institutions than states lacking them. For instance, Nigeria in 1999 and Somalia in 2004 had respectively nine annual occurrences of non-state conflicts each. These are the two "outliers" in my data as they both represent the extreme values of yearly occurrences. While Somalia does not have representative institutions (or any other functioning institutional structures), Nigeria possess some. In fact, Nigeria have a SIP of 0.65 in 1999, which is above the global mean of 0.58 in 1999. This plot might reflect the same relationship between representative institutions and intra state conflicts suggested by many scholars. Having representative institutions does not necessarily bring civil peace when controlling for other factors (See eg. Collier and Hoeffler 2004; Vreeland 2008; Hegre and Nygård 2014).

There are some limitations with drawing conclusions from the plot in Figure 5.2. The figure only displays how annual counts is distributed. The plot does not give a nuanced picture of how many counts actually belonging to types of political regimes. In Table 5.1 have I categorized the observations and summarized the number of counts based on a threefold distinction between political regimes. Judging by the number of counts, it becomes clear that states experiencing several annual occurrences is more common in anocracies and autocracies compared to democracies. The same relationship is displayed in Figure 5.4. By looking at relative share, Figure 5.4 prevails a more nuanced picture of how annual counts is distrusted among democracies, anocracies and autocracies. While having one annual occurrence of non-state conflict is as common in democracies as autocracies, high counts are more frequent the less open regimes.

Table 5.1: Non-state conflicts by representative institutions

	Rep. Inst.	N	n	Counts
Autocracy	< 0.2	703	99	250
Anocracy	$\geq 0.2 < 0.8$	930	99	205
Democracy	≥ 0.8	1271	67	95
Total	$[0, 1]$	2904	265	550

Source: Strand et al. (2012); Heston and Aten (2012); Hegre and Nygård (2014); GROWup (2014)

Figure 5.2: Distribution of observations by representative institutions

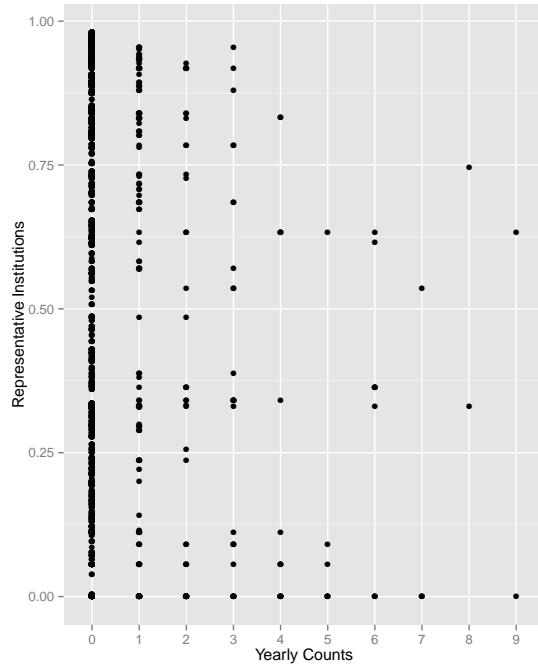
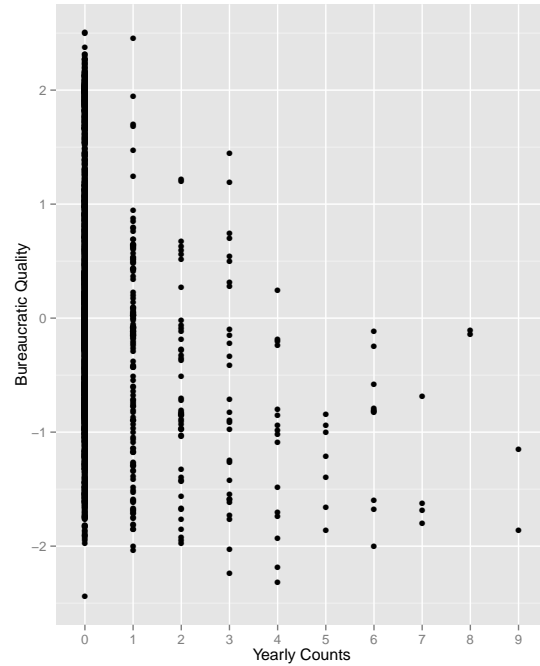


Figure 5.3: Distribution of observations by bureaucratic quality



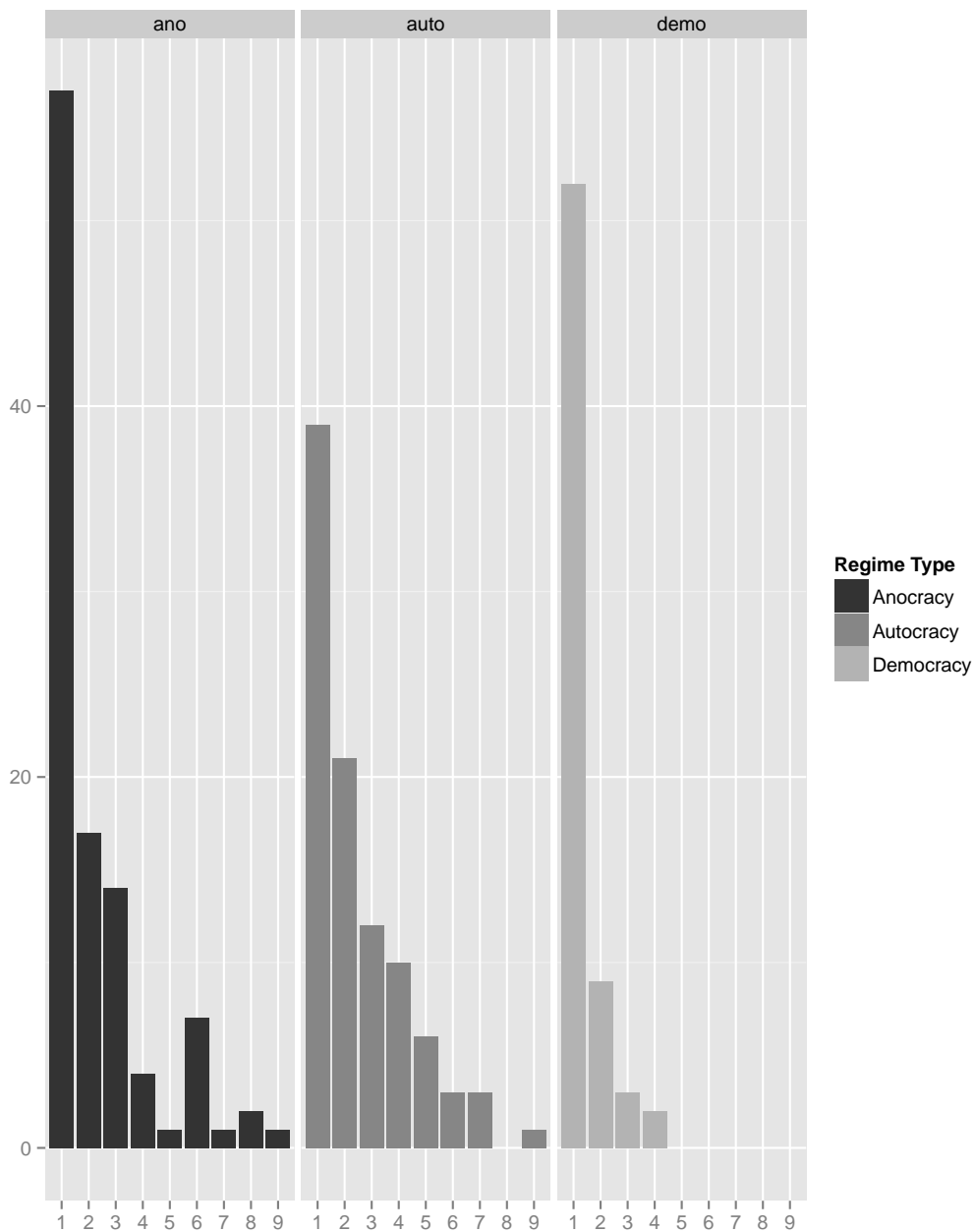
Bureaucratic and Administrative State Capacity

In Hypothesis *H2* I put forth an expectation of low levels of bureaucratic and administrative state capacity leads to more non-state conflicts. Figure 5.3 gives support for this proposition. There is a clear tendency for observations with high counts to occur in states with low levels of bureaucratic and administrative capacity. The pattern is much stronger than for representative institutions and provides some preliminary evidence for the expectation regarding bureaucratic capacity as precondition for governance.

In Table 5.2 I have categorized the variable *bureaucratic quality* by three levels based on one standard error distance from the mean.² The table provides some preliminary evidence with regard to Hypothesis *H2*. States with high levels of bureaucratic capacity experience less non-state conflicts compared to the other categories. States with low and medium levels of bureaucratic quality tend to have more observations as well as higher counts. When looking at the relative share of counts, non-state conflicts becomes phenomena of states characterized by malfunctioning bureaucracies. The same relationship is portrayed in Figure 5.5 where high counts occur more often within states with low or medium levels of bureaucratic quality.

²The mean for the variable is 0.05 and the standard error is 1.00

Figure 5.4: Frequency of non-state conflicts by types of representative institutions



Regime Change

For regime changes have I set forth a set of hypotheses. Hypothesis $H3a$ expects a general increase conflicts by regime change. I have chosen two indicators for this hypothesis, one incorporating periods of state collapse and one not. Respectively are they named: *state collapse* and *regime change*. Hypothesis $H3b$ expects increase by autocratization. For democratization I have two competing hypotheses, where Hypothesis $H3c$ expects an increase

Table 5.2: Non-state conflicts by bureaucratic quality

	Bur. Qual.	N	n	Counts
Low	< -0.953	344	81	203
Medium	$\geq -0.953 < 1.056$	2058	173	330
High	≥ 1.056	502	11	17
Total	$[-2.442, 2.5060]$	2904	265	550

Source: Strand et al. (2012); Heston and Aten (2012); Hegre and Nygård (2014); GROWup (2014)

and $H3d$ a decrease.

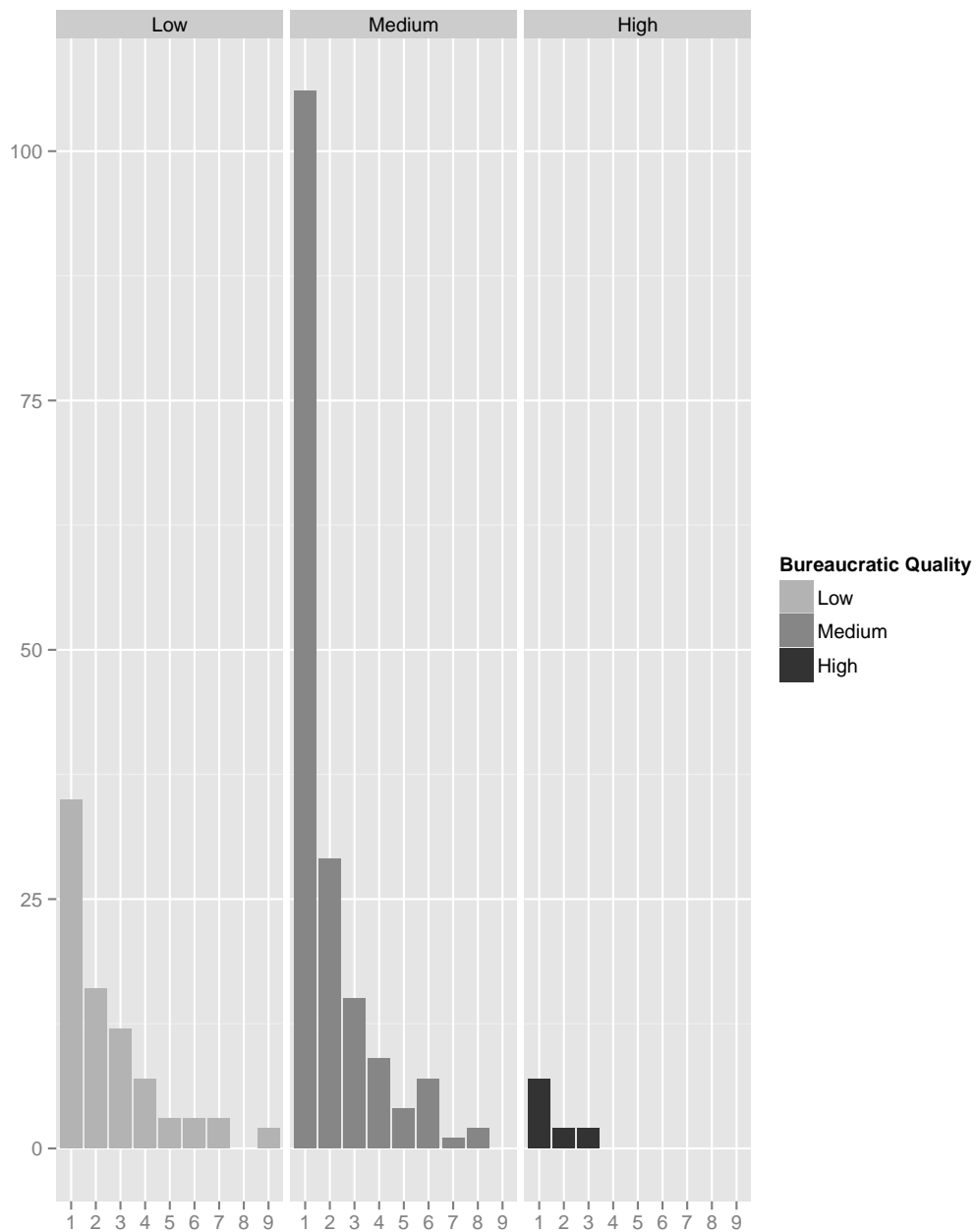
In Table 5.3 I display how often non-state conflicts is observed by type of regime change. By no surprise, the *state collapse* has the highest number of observations and counts of non-state conflicts. This is largely due to the operationalization of the variable, as it is more inclusive than the rest. However, there is also a theoretical expectation behind this. As state collapse brings a security dilemma for groups, we would expect non-state conflicts to occur more frequently. Thus, it gives some evidence for hypothesis $H3a$, but only when regime change includes longer periods without a governing body. When regime change is operationalized by excluding cases of "stable" instability (state collapse), the picture is less clear whether non-state conflicts is phenomenon associated with regime change. There is slightly tendency for non-state conflicts to occur within the context of a regime change. By looking at the number of counts, autocratic changes have the highest number. This could suggest that direction of change matters as autocratization relatively tend to be more often associated with conflict than democratization. Figures displaying the relative shares of counts over the different indicators of are found in Appendix A.

5.2 Multivariate Regression Results

While descriptive statistics provides expectations about what to find in the analysis, the actual explanatory of each argument will be tested in multivariate analysis. In the following section I start off by presenting the unconditional hypothesis regarding representative institutions, bureaucratic and administrative capacity and regime changes. Secondly I will present the result from the conditional model where I allow bureaucratic and administrative capacity to interact with regime changes. Results from the unconditional analysis are found in Table 5.4 and the results from the conditional found in Table 5.5.

CHAPTER 5. RESULTS

Figure 5.5: Occurrences of non-state violence by bureaucratic quality, histogram of bureaucratic levels



All results are estimated with a negative binomial regression. All models include controls for population, income level, relevant groups and peace years. Results from a baseline model with just the controls can be found in appendix A, table B.1. All independent variables are lagged by one year in order to strengthen causal inferences from the analysis.

Table 5.3: Non-state conflicts by type of regime change

Type of change	N	n	Counts
State Collapse	324	79	196
No State Collapse	2580	186	354
Total	2904	265	550
Regime Change	255	32	64
No Regime Change	2649	233	486
Total	2904	265	550
Autocratization	87	16	36
Democratization	168	16	28
No Demo. or Auto.	2649	233	486
Total	2904	265	550

Source: Strand et al. (2012); Heston and Aten (2012); Hegre and Nygård (2014); GROWup (2014)

5.2.1 Representative Institutions

In the theoretical framework I set out a hypothesis regarding how democratically elected leaders occupy incentives that leads to (1) policies that reduce tension between groups and (2) act in a neutral conflict reducing matter if conflicts erupted. My focus on incentives rather than actions is based on existence of authoritarian regimes enhancing policies benefitting the population at whole. In order to substantially distinguish these regimes from each other, I have focused on how representative institutions put forth stronger incentives for conflict and grievance reducing behaviors. The joint effect is summarized in Hypothesis *H1*: Representative institutions decrease the risk of non-state conflicts.

In my analysis, I find little support for the conflict reducing effect of representative institutions. The estimate of 0.01 gives and odds ratio close to 1.00.³ This means that any increase or decrease along the democracy- autocracy dimension leads to no change whatsoever in the risk of non-state conflicts. This estimate is also highly insecure, manifested by large standard errors. While the bivariate examination showed a clear tendency for non-state conflicts to occur within less democratic states, the argument loses its power when tested against other predictors. Figure 5.6 displays the predicted counts of non-state conflicts over representative institutions when holding all other variables at their mean. The horizontalness of the line and the huge confidence intervals displays the absent effect as well as the huge insecurity.

The non-importance of representative institutions in my analysis could be seen as an argu-

³ $Exp(0.01) = 1.01$

Table 5.4: Results, non-state conflicts 1989-2008

	Model 1	Model 2	Model 3
(Intercept)	-2.48** (0.82)	-1.91* (0.79)	-1.85* (0.81)
Rep. Inst.	0.01 (0.22)	0.01 (0.07)	0.07 (0.23)
Bur. Qual.	-0.28** (0.10)	-0.36*** (0.10)	-0.36*** (0.10)
State Collapse	0.62*** (0.16)		
Regime Change		0.06 (0.20)	
Autocratization			0.46† (0.28)
Democratization			-0.29 (0.28)
Population (ln)	0.48*** (0.06)	0.45*** (0.06)	0.45*** (0.06)
GDP per cap (ln)	-0.38*** (0.07)	-0.39*** (0.07)	-0.40*** (0.07)
Relevant groups	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Peace Years	-0.91*** (0.10)	-0.93*** (0.10)	-0.93*** (0.10)
Peace Years ²	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Peace Years ³	-3.01*** (0.84)	-3.07*** (0.85)	-3.08*** (0.85)
Theta θ	0.73*** (0.11)	0.70*** (0.11)	0.70*** (0.11)
N	2904	2904	2904
AIC	1833.40	1848.14	1846.40
BIC	2096.25	2110.99	2133.14
$\log L$	-872.70	-880.07	-875.20

Negative binomial regression

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

ment in correspondence to the propositions that haunt and challenge the democratic peace theory. By suggesting that both democracy and civil peace is the result of socio-economic development, they reverse the causal argument about democracy and peace (Mousseau 2000, 2013; Gartzke 2007). Despite finding a bivariate tendency between representative institutions and non-state conflicts, the variable have little explanatory power when other covariates are included. In particular, the leverage and precision of income level indicator speaks in favors of a socio-economic relation between non-state conflicts and absence of violence. However, it is hard to dismiss representative institutions as an explanation of non-state conflicts. The relationship between democracy, socio-economic development and collective violence are known

to be complex. Or in the words of Hegre (2014, pg. 167): "It would be premature to conclude that development completely removes the importance of democratic institutions (...)" Despite the non-importance in my analysis, I am reluctant to dismiss representative institutions as an explanation for non-state conflicts.

Figure 5.6: Predicted counts over representative institutions (Model 1)

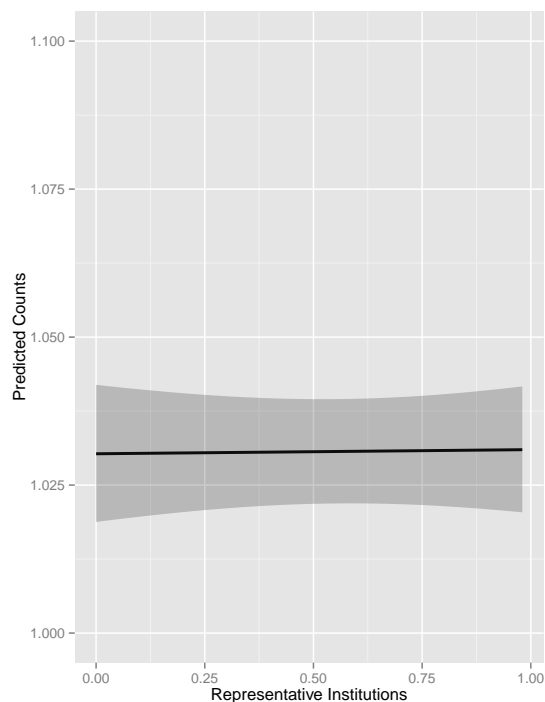
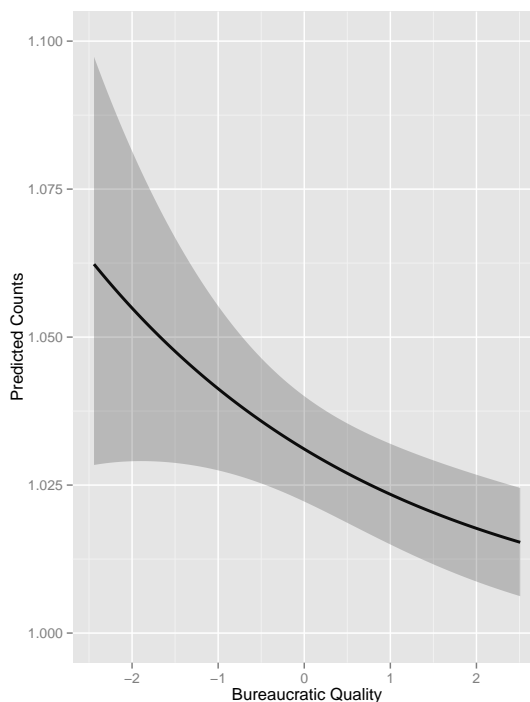


Figure 5.7: Predicted counts over bureaucratic quality (Model 1)



5.2.2 Bureaucratic and Administrative State Capacity

In Hypothesis *H2* I expected states with low bureaucratic and administrative capacity to be less able to govern. While representative institutions might equip states with good intentions, intentions alone are not a sufficient cause for conflict reducing behaviors.. It might be a necessary condition for good governance, but it is not sufficient one. That was why I complemented the relationship between states and non-state conflicts with an additional hypothesis regarding the capacity to fulfill actions. By making bureaucratic and administrative capacity the pre-condition for governance, I put forth an expectation of how states with strong bureaucratic and administrative capacity would have less non-state conflicts. Since all state leaders ultimately prefer order over disorder, the accomplishment of order will be easier when the administrative apparatus is functioning properly.

In addition, low levels of bureaucratic and administrative capacity constitute a threat to group's security. It leads to mechanisms where state agents no longer fulfill their role as providers of security. In the most perverted cases, state agents themselves become the source of danger groups need protection from. Ultimately, this leads to a shift in the regulation of violence from state-based to privately-based. Jointly, the ability to govern and groups' interpretation of security, hinge upon the state's bureaucratic and administrative capacity. Hence, states with low levels bureaucratic and administrative capacity will have more non-state conflicts.

In my analysis, this expectation is supported across all models. Increase in the indicator of bureaucratic and administrative capacity leads to decrease in the risk of non-state conflicts. Figure 5.7 displays this effect from model 1 when all other variables are kept at their mean. The predicted number of non-state conflicts is 1.06 for states attaining the lowest level of bureaucratic quality while it is 1.01 for states with the highest levels of bureaucratic quality. This finding gives support to Hypothesis *H2*, where I expected a decrease in non-state conflicts when levels of bureaucratic and administrative capacity rise.

There is some insecurity attached to the precision of this estimate. In the models including state collapse as indicator of regime change, the respective magnitude of bureaucratic and administrative capacity is reduced. Standard errors for bureaucratic and administrative capacity are higher in Model 1 and Model 3. I suspect the loss of precision in these two models to be the result of co-linearity between the indicator of state collapse indicator and bureaucratic quality. Since the state collapse indicator include cases where "(...) the scope of the central authority was reduced to a few square blocks of Beirut (...)" (Jaggers, Gurr and Marshall 2012, pg. 19), I suspect that it is difficult to discriminate between their relative effects. Since a collapse of central authority consequently leads to a collapse of other institutional structure (like the bureaucracy), I do believe that standard errors for bureaucracy quality are slightly inflated in models including state collapse.

5.2.3 Regime Change

For regime change I have put forth a set of hypothesis. The first, Hypothesis *H3a* expect regime change, independent of direction, leads to an increase in non-state conflicts. This is because a state busy occupied reorganizing generates two mechanisms that together increase the risk of non-state conflicts. Firstly, it provides opportunity and motivation for actors seeking to increase their leverage. Secondly it leads to a deterioration of groups' security situation. A state busy occupied reorganizing will not have the means or priorities to provide

security. To test Hypothesis *H3a*, whether regime change per se bring non-state conflicts, I rely on the indicators *state collapse* and *regime change*. Whereas state collapse incorporates longer time span without a governing body, the latter includes only actual year to year movements along the autocracy-democracy dimension.

Regime Change per se

By no surprise, the indicator of state collapse proves to be significant across all my models. In the unconditional models, it proves to be a strong predictor of non-state conflicts. Since this indicator includes cases of state collapse, it confirms the theoretical expectation about how about how anarchical settings lead to situations where groups have to rely on private sources of security. When state structures are absent, protection has to be privately supplied. Figure 5.8 shows the predicted probabilities from Model 1 when all other variables are kept at their mean. It clearly shows that when regime change incorporate longer periods without a governing body, conflicts between groups becomes more likely.

Figure 5.8: Predicted counts over of state collapse (Model 1)

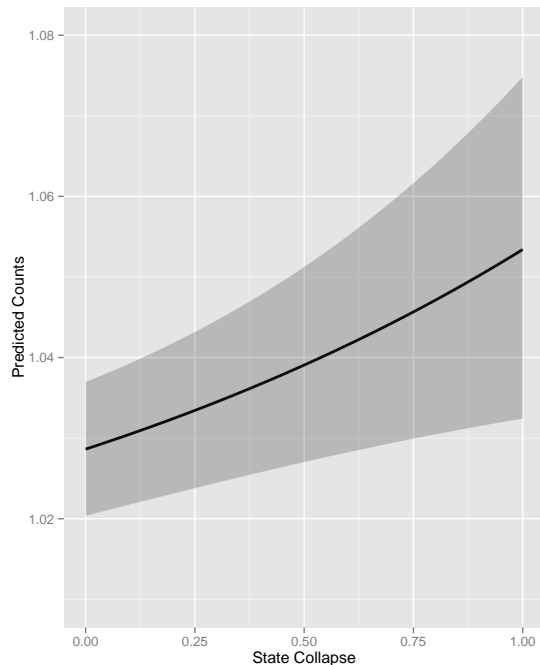


Figure 5.9: Predicted counts over regime change (Model 2)

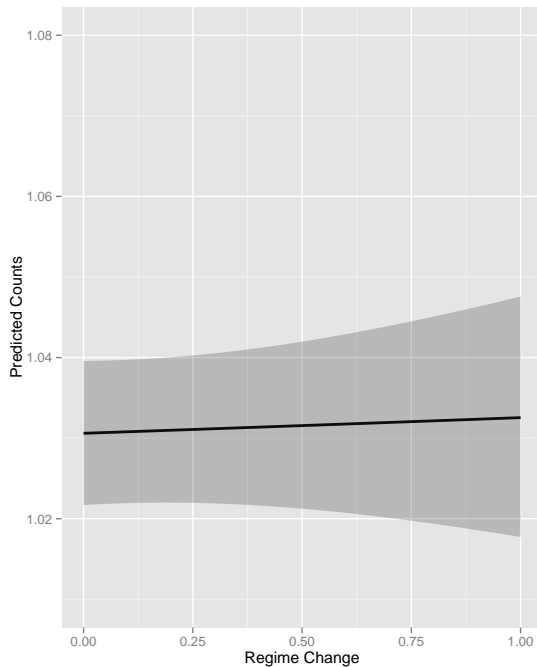


Figure 5.8 differs from Figure 5.9 with regards to its definition of regime change. While they both put forth a relationship where change matters, the right panel does not encompass long periods without governing bodies as a regime change. It focus solely on how a difference

CHAPTER 5. RESULTS

in institutional structures previous year leads to a potential increase in non-state conflicts. When I test the effect of regime change by using this indicator, I find no relationship. Model 2 reports a highly insecure estimate with effect. Since the results in Model 1 and Model 2 differs, it displays that competing definitions and different indicators leads to situations where regime change is a phenomenon related to non-state conflicts or not. Figure 5.9 and Figure 5.8 display the effect of the two indicators on the risk of non-state conflicts when all other variables are kept at their mean. The state collapse indicator has a clear effect, whereas the less inclusive regime change has little. The two figures also tell a story about how precise the estimates are, where there is a higher degree of uncertainty linked to the less inclusive indicator.

Figure 5.10: Predicted counts over autocratization (Model 3)

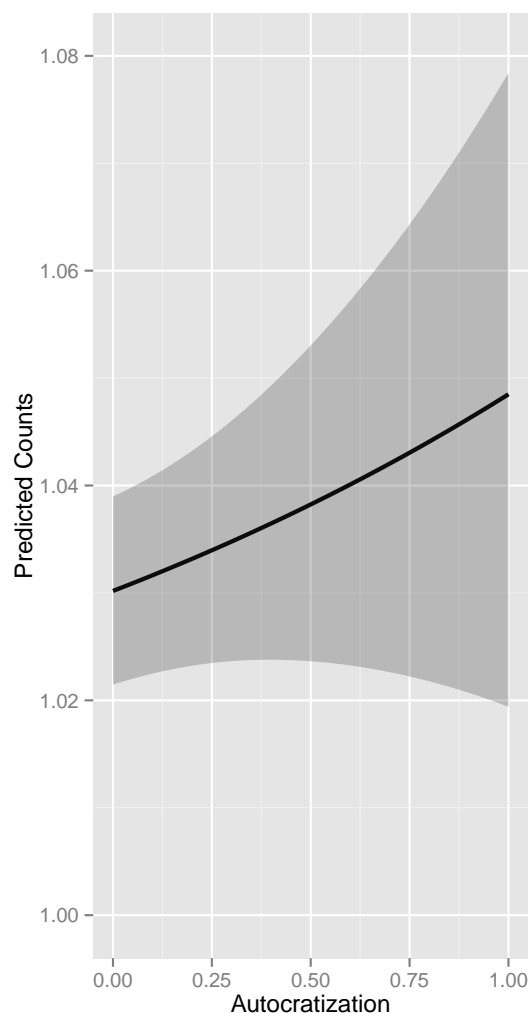
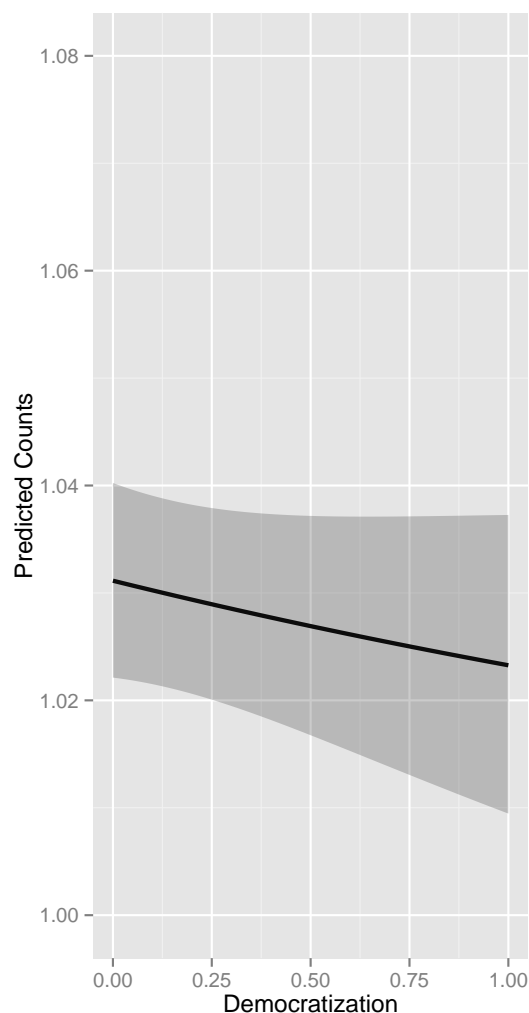


Figure 5.11: Predicted counts over democratization (Model 3)



Direction of Regime Change

In Model 3 I have tested whether the direction of change matters when explaining non-state conflicts. The estimate behaves like expected for the hypothesis regarding the relationship between autocratization and non-state conflicts. Hypothesis *H3b* expects autocratization to lead to an increase in non-state conflicts. This was due to the narrowing nature of autocratization as it tends to decrease policies favoring the population at whole. Since autocratization favors the few over the many, it provides groups with motivation to resist it. This leads to two mechanisms jointly increasing the risk of non-state conflicts. Since autocratization narrows down the regime's support base, it alters the proportion of the population supporting the regime. Since this is likely to cause grievance, autocrats need to ensure that support base is loyal. This leads to a trade where support is backed up by putting forth policies favoring the support base. When doing so, the seeds of tension are sowed between the favored and un-favored. Secondly, groups can signalize their disloyalty by challenging the new polity's monopoly of violence. By penalizing other groups, they signalize that an autocratization will not be met by compliance. Since regime change tend to destabilize state structures, the combination of opportunities for violence and dissatisfaction leads to an increase in non-state conflicts.

For democratization, I put forth two hypotheses with diverging expectations. Democratization could both lead to increase and decrease of non-state conflicts. As suggested by Acemoglu and Robinson (2006), democratization works differently depending upon point of departure. When this argument is applied to non-state conflicts, it gives a logic where the governing elite repress if they have much too loose from a political opening. If not, the costs of repression surpass the benefits. In this case, democratization becomes an admission of failure on behalf of the elites. Hence, they will not fight against an opening. For non-state conflicts, groups affiliated with the governing elite will either much or little too loose from democratization. If they have much to lose, they posit incentives to fight off groups threatening their position. This causes democratization to lead to an increase in non-state because groups it increases tension between groups. However, when the favored group considers the cost of repression higher than their disadvantage caused by democratization, the transition process brings less violence.

I test the three hypotheses regarding direction of change in Model 3. I find some support for the autocratization hypothesis. The estimates take the expected direction, but the estimate is imprecise, with high standard errors. It barely crosses the 10% significance level, suggesting high levels of insecurity. Figure 5.10 shows how autocratization leads to a decrease in non-

state conflicts. Model 3 favors the hypotheses suggesting a decrease in non-state conflicts by democratization. The estimate takes a negative value, but high standard errors leads to a questioning of its certainty. Figure 5.11 reflects the decreasing effect, but also its lack of precision as the confidence interval is broad.

5.2.4 Control Variables

The control variables all behave like expected. The only one that do not prove to be significant was the indicator of relevant groups. Figure 5.12 shows the marginal effect as well and the respective confidence interval for each included variable in Model 3.

The controls for population size and income behave like expected. They correspond to the findings within the broader conflict literature. Throughout all my models, including the conditional models, population size and income levels are the strongest predictors of non-state conflicts. As within the broader conflict literature, non-state conflicts are also a phenomena more frequently associated with poor and populous countries.

Peace year is also significant across all my models; suggesting states' proximity to previous conflict is of importance. The significance of the peace year variable large corresponds to the proposition conflict legacy to be of importance when explanting new outbreaks.

The only control that does not have any impact is the variable counting the number of relevant groups. This means that number of potential conflict dyad have little leverage in explaining non-state conflicts when controlled for other factors. This control was somewhat a "wild card" compared to other controls. Although there were some expectations regarding its potential leverage, I did not anticipate this control to trump other robust controls.

5.2.5 Regime Change by Bureaucratic and Administrative State Capacity

Table 5.5 assess hypothesis H_4 , regarding whether regime change is conditional upon bureaucratic and administrative capacity. The models included here investigate whether the combined effect of regime changes and bureaucratic and administrative capacity mediates the risk of non-state conflicts. All the models in Table 5.5 include a conditional term, making the interpretation regime change on the increase of non-state conflicts dependent upon bureaucratic quality.

5.2. MULTIVARIATE REGRESSION RESULTS

Figure 5.12: Marginal effects (Model 3)

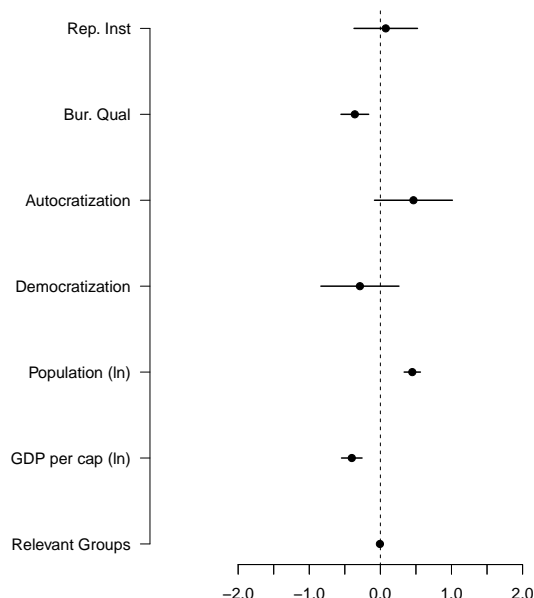
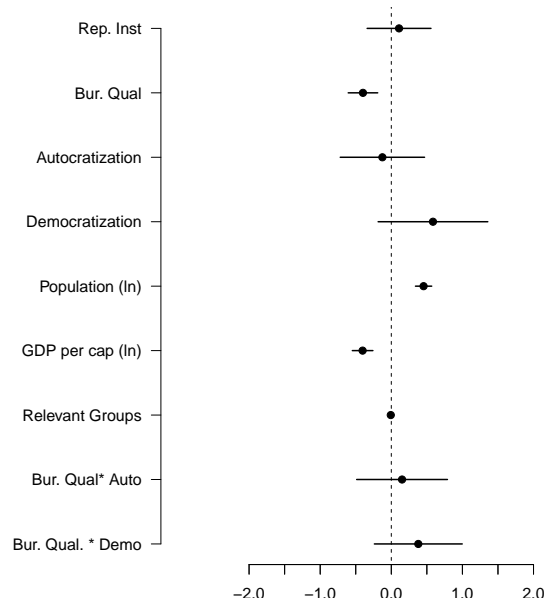


Figure 5.13: Marginal effects (Model 6)



Since bureaucratic and administrative state capacity often is defined as the ability to govern thorough political changes (See eg. Skocpol 1979; Goodwin and Skocpol 1989; Schock 1996; Knack 2001) I would expect that the effect of regime change to be conditional upon this aspect of state capacity. This proposition is not supported in any of my models. The interaction terms fail to be significant across all models. Figure 5.14 and Figure 5.15 display the effect of democratization and autocratization by bureaucratic quality. Since the confidence intervals overlap and the estimates are very high, there do not seem to be any conditional effect of regime change by bureaucratic and administrative state capacity.

This non-finding needs some probing. Could it be that only high levels of bureaucratic quality enable states to avoid the conflict increasing potential of regime change? The non-finding could also be due to the inclusiveness of the indicator. It entails more aspects than just the ability to govern through changes. Since regime change only proved to be an explanatory when including state collapses it causes me to bring up this question. It also raise a question of endogeneity as a non-state conflict could be the reason to states levels of bureaucratic quality and administrative capacity.

Table 5.5: Results conditional model, non-state conflicts 1989-2008

	Model 4	Model 5	Model 6
(Intercept)	-2.46** (0.81)	-1.97* (0.80)	-1.92* (0.81)
Rep. Inst.	0.01 (0.17)	0.01 (0.16)	0.10 (0.23)
Bur. Qual	-0.23* (0.11)	-0.38*** (0.10)	-0.40*** (0.11)
State Collapse	0.44† (0.23)		
Bur. Qual. * State Collapse	-0.19 (0.18)		
Regime Change		0.15 (0.24)	
Bur. Qual. * Regime Change		0.14 (0.22)	
Democratization			-0.13 (0.30)
Autocratization			0.58 (0.39)
Bur. Qual. * Auto.			0.15 (0.33)
Bur. Qual. * Demo.			0.38 (0.32)
Population (ln)	0.48*** (0.06)	0.46*** (0.06)	0.45*** (0.06)
GDP per cap (ln)	-0.37*** (0.07)	-0.39*** (0.07)	-0.40*** (0.07)
Relevant Groups	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Peace Years	-0.90*** (0.10)	-0.92*** (0.10)	-0.93*** (0.10)
Peace Years ²	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Peace Years ³	-2.98*** (0.84)	-3.05*** (0.85)	-3.05*** (0.85)
Theta θ	0.73*** (0.11)	0.71*** (0.11)	0.71*** (0.11)
N	2904	2904	2904
AIC	1834.19	1849.71	1848.79
BIC	2120.93	2136.45	2183.33
$\log L$	-869.09	-876.85	-868.40

Negative binomial regression

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

5.3. PROBING THE RESULTS: QUANTITIES OF INTEREST

Figure 5.14: Predicted counts over autocratization by bureaucratic quality (Model 6)

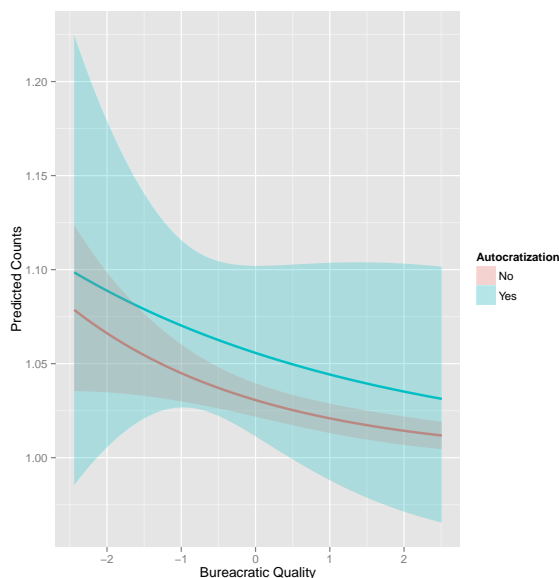
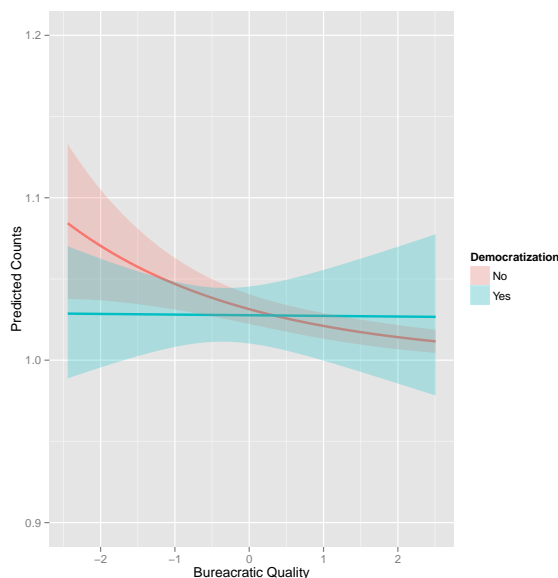


Figure 5.15: Predicted counts over democratization bureaucratic quality (Model 6)



5.3 Probing the Results: Quantities of Interest

In the former section I have only addressed the effect of the explanatory variable when other variables were kept at their means. By doing so, it enabled me to isolate their respective effect on the dependent variable. However, this approach provides a somewhat less nuanced picture as the global means do not necessarily represent substantially interesting values. In order to provide a nuanced picture, I follow the recommendations from King, Tomz and Wittenberg (2000) in simulating quantities of interest. Given my research question, and the results from the analysis, I simulate the probability of non-state conflicts when levels of bureaucratic quality differ and regime change occurs. For each simulation I will provide a discussion on how they relate to hypothesis put forth. I will address the effect of the estimate and the uncertainty attached to it.

From the broader conflict literature we know that some states are constantly at higher risk for armed conflict than others. Common for these countries are that they do not represent the global mean. The inhabiting certain characteristic that makes armed conflicts likely. Among the explanatory variables I have put forth, bureaucratic quality has proven to be the most robust indicator. Based on values from this indicator I will construct three scenarios where I examine the effect of regime for states that are in the risk zone and states that are not. This approach allows for a more substantial interpretation of the results as it allows

CHAPTER 5. RESULTS

for a comparison between states that are predisposed for conflicts and states that are not.

Based on the separation between "low" and "high" levels on the variable of bureaucratic quality I have constructed two imaginary states which inhabit certain characteristics that make them at "high" or "low" risk for experiencing non-state conflicts. This categorization is the same found in Section 5.1.⁴ Based on this separation I find the mean for each respective explanatory variable within the two categories. These mean values are presented in Table 5.6. By doing so, it becomes clearer that states with low levels of bureaucratic quality differ from states with high levels. For instance, the average peacespell is 9.23 years for states with high bureaucratic quality and 4.21 for states with low. This shows that conflicts more frequently erupt in states with low bureaucratic levels. Further, the high risk category diverges from the low risk category by the robust predictors from the broader conflict literature. It has a higher population and a lower income level. Although these two states do exist in reality, they are useful theoretical constructs. They provide substantial meaning as they inhabit characteristics from stereotypes of states associated with high and low levels of conflict.

Table 5.6: Scenario values for states with low and high risk for non-state conflicts

	Low risk	High risk
Bur. Qual.	$[-2.44, 2.51]$	$[-2.44, 2.51]$
Rep. Inst.	0.91	0.30
GDP per cap (ln)	10.09	6.98
Population (ln)	9.58	9.15
Rel. Groups	2.60	4.15
Peace Years	9.23	4.21
Democratization	0.01	0.09
Autocratization	0.00	0.08

I apply three different scenarios where I predicted the probability of non-state conflicts within for the two imaginary states. The use of predicted probabilities somewhat resembles an experiment. I can isolate the effect of the explanatory variables on different groups, or set of states. The scenarios I have chosen to expose them to are: state collapse, democratization and autocratization. I have chosen these scenarios based on the results from the analysis. These were the explanatory variables proving to have the most leverage. Thus, I will proceed by examining them. In each scenario I allow the level of bureaucratic quality and regime change vary while all other variables correspond to the means within the risk sets. For each scenario I will provide a discussion of the explanatory variable's leverage.

⁴The low and high category represent those states that either are one standard error higher or below the mean of the bureaucratic quality variable

5.3.1 Regime Change per se: State Collapse

In Figure 5.16 and Figure 5.17 I display the effect of state collapse for the two imaginary states.⁵ A general comparison of the figures tells how an increase in bureaucratic levels leads to a decreasing risk of evolving non-state conflicts for both risk sets. This corresponds to the robust finding of bureaucratic and administrative from the multivariate analysis.

What is interesting is how they differ when they are "treated" (this is after all an experiment) with state collapse. The situation immediately becomes more severe for the state inhabiting unfavorable characteristics. For the rich and less populated state, the effect of state collapse hardly leads to any increase in the risk of evolving non-state conflicts. This is due to the rather unreal scenario where a state, says Sweden, should experience a state collapse. If government structures were to disappear overnight in Sweden, it inhabits characteristics that make the probability of evolving non-state conflicts very unlikely.

One real life example resembling the unfavorable state is Liberia. It is an intermediate regime in the lower anocracy range, quite populous and quite poor. Since the start of the 1980s, Liberia has been in a state of turmoil. The situation took a dramatic shift in 1989 when the Independent National Patriotic Front of Liberia (NPFL) attempted to topple Samuel Doe's regime and re-institute democracy. After the attempt, Liberia became a divided country ravaged by armed conflicts. While the endeavor to overturn Doe's regime led to a full scale civil war, clashes between non-state actors also evolved. One example is the internal disagreement within the NPFL leading to a splintering of the movement. As a product of the disagreements, Independent National Patriotic Front of Liberia (INPFL) emerged. Consequently, NPFL and INPFL clashed (UCDP 2014). While clashes between different rebel factions are quite common within a shattered state (Bakke, Cunningham and Seymour 2012; Cunningham, Bakke and Seymour 2012; Fjelde and Nilsson 2012), the clash between NPFL and INPFL represents only the tip of the iceberg of non-state actors clashing in the aftermath of the state collapse.

While the struggle between armed groups in Liberia often have been portrayed as fights over natural resources and government power (Ross 2004b), other scholars have argued that was the weak institutional structures that led to the fighting (Ellis 1995; Duffield 1998). By looking more closely at Liberia's non-state conflicts, the majority occurred within the state collapse brought forth by the civil war. The breakdown of central authority "(...) produced a mosaic of militia zones of control, where civilians have some degree of protection but must pay tribute in kind to the local warlord, and constantly shifting frontier zones in which civilians

⁵Based on estimates from model 1.

CHAPTER 5. RESULTS

Figure 5.16: Scenario 1: State collapse for a state at high risk

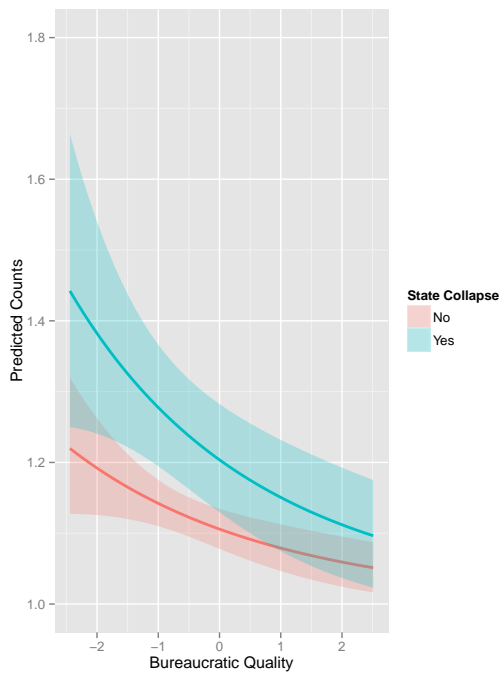
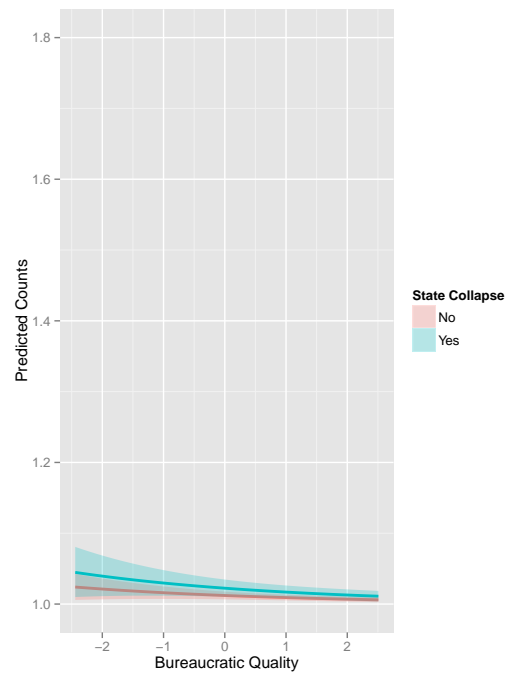


Figure 5.17: Scenario 1: State collapse for a state at low risk



are liable to raiding from all sides” (Ellis 1995, pg. 185). This case clearly speaks in favor of the state collapse hypothesis and the bureaucratic and administrative state capacity thesis. When states resemble the Hobbesian ”nature condition”, violence will occur more frequently between groups. While some groups fight over government power, others are left in security dilemma, consequently leading them to take up arms. In the shadow of an absent state, security has to be privately supplied, leading to the armament of groups.

One false positive case of the theory is Azerbaijan. With the dissolvent of the Soviet Union, Azerbaijan regained its independence under less than ideal and orderly conditions. Their internal characteristics for Azerbaijan in 1993 resembles the imaginary state predisposed for conflicts. There is one exception, and that is the number of citizens: Azerbaijan is not so populous. In 1993 Azerbaijan is recorded with an observation on the state collapse variable. This was due to a overthrow of the democratic elected president Elchibey by former Soviet military officers (Cornell 2001). Despite this, Azerbaijan did not have any non-state conflicts. This suggests that regime change does automatically bring non-state conflicts. However, it often brings a destabilizing situation where armed conflicts are more likely to erupt. While it in the Liberian case resulted in both non-state conflicts and civil war, it ”only” resulted to a state-based conflict for Azerbaijan. Findings from Gleditsch and Ruggeri (2010) supports my argument about opportunities of violence emanated from political instability. While

5.3. PROBING THE RESULTS: QUANTITIES OF INTEREST

they investigate civil wars, the same logic is applied. Gleditsch and Ruggeri find that the interregnum category and the transition category of the Polity Index is strongly associated with an increase in the risk of civil conflict.

To summarize, state collapse is a situation of regime change that causes non-state conflicts to erupt. For states with unfavorable characteristic, the effect of state collapse is likely to bring non-state conflicts. While it did not do so in the case of Azerbaijan, the explanatory power of the state collapse argument still stands strong. Regime change, defined to include state collapse, is a highly unstable condition where non-state conflicts significantly evolve. Estimates from my analysis signal that state collapse causes non-state conflicts. A state collapse brings opportunities groups seeking government office and for those that do it leads to a deterioration of security. For rebel groups it is a situation where future leverage hinges on the ability to fight of other rivals. For other non-state actors it leads to security dilemma where the solution is to privately supply security. When these two mechanisms operate together, or separately, it leads to an increase in non-state conflicts. These findings give support to Hypothesis *H1*; stating regime change leads to increase in non-state conflicts. However, it is just in the cases where regime change incorporate longer periods without a governing body that it regime change increase the risk of non-state conflicts.

5.3.2 Direction of Change: Autocratization

In Figure 5.18 and Figure 5.19 I display the effect of an autocratization for the two risk sets.⁶ Once again, higher levels of bureaucratic quality are associated with less non-state conflicts. What makes these two figures differ are the predicted probability of conflicts during an autocratic transition. The predicted number of yearly counts for a high risk state with low bureaucratic levels going through an autocratization is 0.55. For a state that lack the internal characteristics associated with conflicts, the predicted yearly occurrences is 0.07 at the same level of bureaucratic quality. This means that over 100 occurrences of autocratization, the high risk state will have 55 non-state conflicts and the low risk state will have 7. However, these numbers should be interpreted with caution. Results from Model 3 suggest that the estimate is not bomber proof, only significant at the 10% level.

I will draw on an example from the Ivory Coast's presidential election of 2001 to explain how autocratization directly can lead to fighting between non-state actors. The country inhabits characteristics that make it disposed for conflicts. The lead up to the election

⁶Based on estimates from Model 3.

CHAPTER 5. RESULTS

Figure 5.18: Scenario 2: Autocratization for a state at high risk

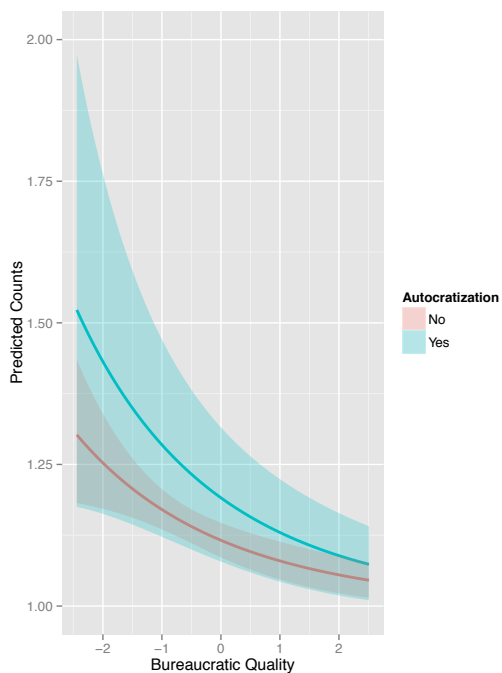
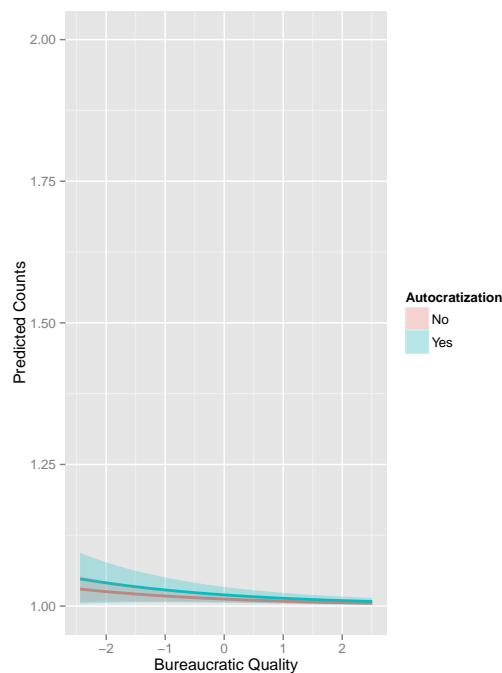


Figure 5.19: Scenario 2: Autocratization for a state at low risk



was marked by civil unrest. A newly approved constitutional change narrowed down the potential candidates allowed to run for office. Eligibility required that both parents of the candidate were born within the country. The consequence was a disqualification of 70% of the candidates. Due to his alleged Burkinabé nationality, the candidate representing RDR (Rassemblement des Républicains de Côte d'Ivoire), Alassane Ouattar was disqualified. This led supporters of RDR and Alassane Ouattar to call the election a fraud, hence claiming new elections. Reluctant to lose his position, President Laurent Gbagbo refused the opposition's claims. In aftermaths, tension between supporters of Alassane Ouattar and Laurent Gbagbo lead to bloody street battles with more than 30 persons killed (Toungara 2001; UCDP 2014).

According to predictions for countries resembling the Ivory Coast, more than half of the cases of autocratization would bring non-state conflicts. While the non-state conflicts in the Ivory Coast is directly traceable back to the shrinkage of the political sphere, the causal link between autocratization and non-state conflicts is in other cases dubious.

One example casting doubts about a causal path between autocratic transition and non-state conflicts is Cameroon. In my dataset, Cameroon is recorded with a total count of five non-state conflicts. One of these counts occurs within the context of an autocratization. In 1998 Cameroon is recorded with a conflict between the Bafanji and Balikumbat tribes. The

5.3. PROBING THE RESULTS: QUANTITIES OF INTEREST

origins of this conflict go back to the 1960s, based on division of land. In 1998 the tension was triggered by a quarrel between Balikumbat locals and a Bafanji traditional chief, in which the car of the chief was seized. While it seems rather arbitrary that a car seizure would lead to more than 50 persons killed, the hostility between the groups had existed for long (UCDP 2014). However, the origins of this particular conflict bring up a discussion of causal relations. It clearly does not speak in favor of a causal relationship between autocratization and non-state conflicts.

Whether autocratization leads to non-state conflicts remains unclear. Based on my analysis I am reluctant to draw this conclusion. What I find is that autocratization is strongly *associated* with non-state conflicts. The reason why I emphasis on associated is by closer examination of the particular states that have simultaneous observations of non-state conflicts and autocratization. These states tend to already be haunted by armed conflicts. Together, the coincidence of non-state conflicts and autocratization makes up a total of 36 counts, distributed between 14 different states.⁷ Most of these observations are states that to already have a ponderous legacy of armed conflicts. The observations include states like Somalia, Afghanistan, Liberia, Sudan and Iraq. The dyads, or warring parties, that make up the counts for these observations are often conflicts that originated long before autocratic transition. Some of them might have inactive for a while, but the origin of tension goes beyond the autocratization argument.

From Hegre et al. (2001) we know that proximity to change often leads to a new change. The road towards consolidation is long and troubled. Within the two categories of imaginary states I have examined, the average number of years since last regime change (both democratic and autocratic transition) is 62.77 for the low risk state and 7.87 for the high risk state.⁸ These two numbers gives a more nuanced picture between the probability of autocratization and the eruption of non-state conflicts. Since change more frequently occur within the state predisposed for conflicts, it adds more doubt to the causal argument between autocratization and non-state conflicts.

Based on the issues put forth, I fail to find any support for Hypothesis *H3b*. While autocratization is strongly associated with non-state conflicts, it fails as a causal argument. By more thoroughly probing the observations of non-state conflicts within the context of an autocratic transition, the causal argument is highly speculative. While non-state conflicts in

⁷These states are Russia, Niger, Ivory Coast, Liberia, Ghana, Cameroon, DR Congo, Somalia, Ethiopia, South Africa, Sudan, Iraq and Afghanistan

⁸These values are based on the more restrictive operationalization of regime change. For the regime change indicator incorporating state collapse, the numbers are slightly altered. For the low risk state the average number of years since change is 63.03. For the high risk state it is 6.92 years.

some case are the results of autocratization, as with the Ivory Coast, the majority of their origins go beyond an autocratic transition. States like Somalia, Afghanistan, Liberia, Sudan and Iraq are already so fiercely stricken by other aspects associated non-state conflicts and political instability. In these cases, adding an authorization to the context is not necessarily the cause needed for conflicts to turn violent. Hence, a causal path between autocratization and non-state conflicts is an argument without leverage in my analysis.

5.3.3 Direction of Change: Democratization

In Figure 5.20 and Figure 5.21 I have simulated the expected number of non-state conflicts over various levels of bureaucratic quality when democratization occurs. The overall picture once again tells a story about the conflict reducing effect of bureaucratic quality. This is true for both the favorable and unfavorable state. Results from Model 3 suggest a negative relationship between democratization and non-state conflicts. The two figures also display this relationship as the blue line of democratization is lower than the red line of non-democratization. For the conflict prone state, with low levels of bureaucratic quality, the expected count of conflicts is 1.23 under democratization. For the non-conflict prone state with similar low of bureaucratic quality, the same number is 1.02. Over a 100 occurrence of democratization, it leads to 123 non-state conflicts for the state at risk, while it leads to 102 occurrences for the state not depositing conflict related characteristics. While this might seem like a drastic effect, there is an also high level of uncertainty attached to it. From the figure we see this as overlapping confidence intervals. Results from Model 3 in Table 5.4 tell the same story; the estimate does not reach significance at the 10% level.

One country sharing characteristics with the imaginary state at risk is Mexico. While Mexico differs from the average high risk state by its level of representative institutions, it has all the other aspects that makes it predisposed for conflicts. I will use Mexico as an example because the country became increasingly democratic since 1989. It is recorded with democratic transitions in 1994, 1999 and 2000.⁹ There is another reason for choosing Mexico as well: it has observations of non-state conflicts outside the years of democratization.

The democratic transitions recorded for Mexico in 1995 was due to an increase in the political participation component. In the mid-1990s, elections become increasingly free. The former practice had favored the Institutional Revolutionary Party (IRP), whom had enjoyed absolute majority in the legislative from 1929. Their electoral victories had often involved fraudulent

⁹In the analysis these values occur by a one year lag structure.

5.3. PROBING THE RESULTS: QUANTITIES OF INTEREST

Figure 5.20: Scenario 3: Democratization for a state at high risk

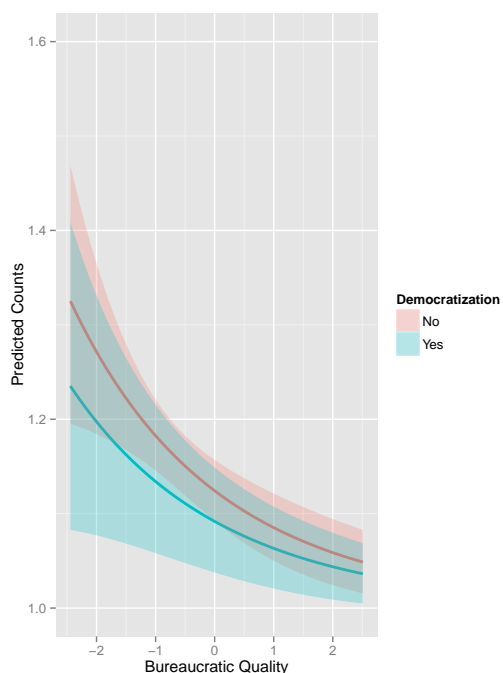
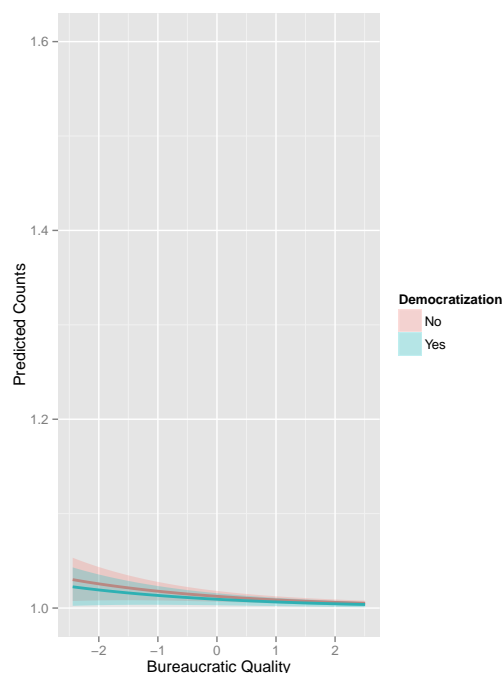


Figure 5.21: Scenario 3: Democratization for a state not at low risk



practices. 1995 marked the first year where opposition parties had a fair chance of winning when running for seats. The elections following the mid-1990s changes led to an end of IRP's hegemonic position. The Democratic Revolutionary Party (DRP) and the National Action Party (NAP) won seats in the legislative and became established actors pushing forth political openings. The recorded transition in 1999 and 2000 are due to increasing constraints on executive powers. From being one-party state to include opposition parties in the legislative, the Mexican Presidency had to operate under higher levels of partisan constraints (CSR 2010).

According to the predictions in Figure 5.20 democratization should lead to a decrease in non-state conflicts in states resembling Mexico. The country is recorded with democratic transition in 1995, 2000 and 2001 and non-state conflicts outside the transitory years. The majority of these clashes were between drug cartels over stakes in the illegal drug industry (Sundberg, Eck and Kreutz 2012). Since the non-state conflicts in Mexico erupted outside the democratic transition, it could be a manifestation of the negative estimates of democratization from Model 3 in Table 5.4. It could also be a pure coincidence, as the estimates have high standard errors. When looking more thoroughly into the Mexican case, none of these explanations seem plausible. Did democratization led to more non-state conflicts in Mexico? After all, there is a profound discourse within the literature suggesting a conflict increasing

CHAPTER 5. RESULTS

effect of democratization. I would argue that the conflicts in Mexico cannot be understood without investigating Mexico's political opening.

For instance, O'Neil (2009) argues that Mexico's political opening in the late 1980s and 1990s subsequently lead to clashes between the drug cartels. O'Neil finds two mechanisms leading to this. Firstly, the democratic transition proved to be an opportunity for the drug organizations to gain autonomy. It hampered the state's capacity to act against the drug cartels, tilting the balance of power from politicians to criminals. Secondly, the democratic transition altered internal relations and dynamics between the drug cartels. With the end of IRP's hegemony came also the end of a state pervaded of corruption, patronage and fund raising. So did the former the patron-client relationships between the government and the drug traffickers. With a government not capable of stopping violence, drug cartels started fighting each other for control over territory and previous alliances (UCDP 2014). In this case, the reorganizing of the state structures, through a democratic transition, led to an increase in non-state conflicts.

I would argue that Mexico represents a case where the starting point of democratization is of importance. Mexico had a bad starting point. When looking into the countries where democratization coincides with non-state conflicts and where it does not, the countries have rather different characteristics. The countries going through democratization without the occurrence of non-state conflicts do relatively inhabit characteristics less associated with conflict. When democratization and non-state conflicts coincide, the state inhabiting unfavorable characteristics have a high risk of erupting conflicts. For example, the mean SIP value for the countries going through a peaceful democratization is 0.60. For those that did not, the mean value is 0.47. For income level, population and proximity to previous conflict the pattern is the same.¹⁰ This means that diverged upon point of departure for democratization. Since the results report the global mean, this nuance may be lost in a sample. It is highly speculative, but the uncertainty attached to the estimate may reflect the different dynamics inherited from different starting points.

The findings give some support to arguments offered by scholars emphasising the importance diverging starting points (See eg. Przeworski 2005; Acemoglu and Robinson 2006; Collier 1999). With a bad starting point, democratization will bring conflicts. After scrutinizing the observations that coincide with peaceful vs non-peaceful democratization, states diverge by

¹⁰For income, the mean GDP per capita values (log transformed) on are 7.20 and 7.79 for the peaceful transitory states vs the non-peaceful transitory state. For peacespells the values are 2.31 years and 6.47 years. For population the values are 10.41 and 9.07 (log transformed). For the bureaucratic quality variable the levels are -0.36 and -0.41.

point of departure before transition. Relatively have the majority of transition have happened in states with favorable conditions. This is reflected in the global negative effect of democratization. I interpret the negative estimate as a support of the argument offered by scholars that emphasis on different starting points for democratization. However, the uncertainty attached to estimates is very. Based on the uncertainty, I find some support for Hypothesis *H3d*, stating a negative relationship between non-state conflicts and democratization.

5.4 Summary

In this chapter I have investigated bivariate and multivariate relations between a set of explanatory variables and non-state conflicts. In general, I find two distinct patterns across my models. Firstly, bureaucratic and administrative state capacity is a robust indicator of non-state conflicts. Secondly, regime change, when incorporating state collapse is also a robust indicator.

Hypothesis *H1* expected states with representative political institutions to have less non-state conflicts because they inhabit incentives to reduce and solve grievance between groups. In my analysis, I do not find any support for this relationship. While there is bivariate tendency for non-state conflicts to erupt in non-democratic states, the leverage of the argument fails when tested in the multivariate analysis. Based on this result I must reject Hypothesis *H1*. However, the rejection does not come without a note of caution. Since representative institutions are known to be an important stimuli for economic development, the might be a democratic effect hidden in other indicators. It is highly possible that the indicators of income and bureaucratic quality have some hidden democratic legacy.

Bureaucratic and administrative state capacity is a predictor robust across all my models. This is in line with the theoretical framework put forth. When states lack the capacity to govern it leads to an increase in non-state conflicts. Thus, Hypothesis *H2* is supported. State's bureaucratic and administrative capacity affects (1) the state's ability to govern and (2) group's interpretation of their security status. With a malfunctioning bureaucracy states no longer possess the capacity to govern their societies. Since even the most non-democratic state prefer order over disorder, the lack of the instrument needed for governance leads to more conflicts. For non-state actors, a malfunctioning bureaucracy leads to deterioration their security status. When groups do no interpret the state as an actor they rely on protection from, protection have to privately supplied. Hence, a state with weak bureaucratic and administrative state capacity will have less ability to solve conflicts as well as it leads to an

CHAPTER 5. RESULTS

armament of groups. Jointly, this leads to an increase in non-state conflicts.

For Hypothesis *H3a* I expected a general increase in non-state conflicts in transitional periods. The provision of both opportunity and motivation would lead dissatisfied actors into conflicts for political leverage. A state occupied re-organizing provides both motivation and opportunity for conflicts. In addition, regime change alters group's security. In my results, I find support for Hypothesis *H3a* under certain conditions. When regime change incorporates periods without a governing body, regime change leads to an increase in non-state conflicts. The anarchic setting of a state collapse leads to a Hobbesian "state of nature", where protection have to be privately supplied. When regime change does not incorporate longer periods without a governing

I have put forth Hypothesis *H3b*, *H3c*, *H3d* to address whether direction of change matters for the relationship between non-state conflicts and political transition. I find some support for Hypothesis *H3b*. There is a slightly tendency for non-state conflicts to be *associated* with the context of an autocratization. After scrutinizing the result I find that autocratization in very few cases is actual reason why non-state actors fight each other. Many of the warring parties that clash under the process of autocratic transition have a history of tension prior to the autocratization. While autocratization is associated with non-state conflicts, the origin of the conflicts often goes beyond the autocratization itself. There is one additional issue weakening the autocratic argument. From our prior knowledge about conflicts we know that proximity to change leads increases the risk of new change. For the states that experience non-state conflicts the spatial distance to prior conflict was little. On this basis I find that autocratization is associated with non-state conflicts due other dynamics that often go beyond the autocratization itself.

For democratic transition, I have set out two competing hypotheses. Hypothesis *H3c* expect an increase in non-state conflicts and Hypothesis *H3d* expect a decrease. While there is no significant support for any of them, the negative coefficient could speak in favor of a conflict reducing effect of democratization. In my data set I have a preponderance of peaceful democratic transition compared to non-peaceful transitions. Consequently, this leads to a negative relation between democratization and conflict. However, this correlation does not sufficiently explain why I find a negative relationship between democratization and non-state conflicts. An aspect I find of importance is how states diverge when they enter democratic transitions. After scrutinizing the cases where transition coincide with non-state conflicts this argument about diverging starting point gains leverage. The peaceful transitory countries had an initial staring point with the mechanisms speaking in favor of a peaceful transition.

Hypothesis H_4 suggested a conditional relationship between regime change and non-state conflicts. I fail to find such a relationship in my analysis.

Chapter 6

Model Diagnostics and Robustness

To ensure that my results are not driven by the choice of indicators and estimation techniques, I will address some issues that potentially could alter the inferences made in the previous chapter. This chapter is somewhat a trial of strength as I test the robustness of my result.

I will start off by looking more closely into the model I have chosen for my analysis. While I in the previous chapter cared about magnitude and precision of the estimates, I will in this chapter address how well the model explains variation in the data. This is important because inferences from a badly specified model will in consequence be dubious. Lastly, I will expose my hypothesis to alternative specifications. If results hold when including new indicators for the same concepts, it serves to strengthen the theoretical argument.

6.1 Measure of Fit

In order to evaluate my chosen research design, I will start off by addressing how the models perform in describing the data. I will carry out this by investigate three issues related to the models' fit. Firstly, I will examine the adequacy of the model by looking at the relationship between predicted values and observed values. Secondly, I will address how non-dependency assumptions underlying the models are met. Lastly, I investigate whether certain observations alter the regression coefficients.

6.1.1 Adequacy of the Model

In order to investigate the predictive power of my models, I will apply the Aike Information Criterion (AIC) for the non-nested models and the log-likelihood test for the nested models. Together, these measures assess the in-sample predictive power of the models.

The AIC is an indicator whom can be used to evaluate the efficiency of models in explaining variation. Compared to the Log-Likelihood, the AIC punish the inclusion of additional variables.¹ Since my models include hypothesis that are not nested, the indicator can be used to find the model, or hypothesis, that explains most of the variation in the data. For models that are nested, the difference in log-likelihood can be used to evaluate whether inclusion of new covariates significantly make models perform better (Ward, Greenhill and Bakke 2010)

All my models are nested in the baseline negative binomial model found in Appendix A, Table B.1. The baseline model includes only the controls. Judging by AICs, the inclusion of explanatory variables rise the in-sample predictive capability across all models. The model with the lowest, or best, AIC value is Model 1 in Table 5.4. It becomes clear that the anarchic setting of a state collapse explains most variation in the dependent variable. Model 1 has a lower AIC than the models assessing regime change per se and direction of regime change. For the conditional hypothesis in Table 5.5, the AIC values increases when compared to the unconditional models. Since the conditional hypothesis was rejected, the models in Table 5.5 are accompanied with an increase in AIC.

Having established Model 1 as most efficient, the log-likelihood test can be used to evaluate performance among the nested models. This leads to an evaluation of the Baseline Models vs Model 1 and the Baseline Model vs Model 2 and Model 3.² Since we already know that the inclusion of covariates lead to an increase predictive power for all the models, the utility of log-likelihood test lies in the comparison between Model 2 and Model 3. In these two models I addressed whether regime change per se brings conflict or whether direction of change also needed to be included. Since the direction of change, and in particular autocratic transition, proved to have some leverage, the difference in log-likelihood is significant between Model 2 and Model 3. Results from the test can be found in Appendix B, B.9.

¹The inclusion of additional variables always will explain more variation (but on the expense of inaccurate estimates), making the AIC a criterion addressing efficiency

²It can also be used to assess whether the inclusion of a interaction term leads to a better model or not. Since the conditional hypothesis have been rejected, the log-likelihood difference is also of non-significance. The log-likelihood test for the unconditional vs conditional models can be found i Appendix B, Table B.6, B.7, B.8.

6.1.2 Temporal and Spatial Dependency Among Observations

One of the crucial underlying assumptions behind the negative binomial model is the independence of observations. While I to some extent have addressed this previously by including peacespells as dependent variables, the peacespells only adjust the estimates according to the proximity to last conflict occurrence. When investigating the models' fit, dependency is linked to assumptions about the error term. An examination of the error term is important since it relates both to inference from the model and efficiency of estimates (White 1980; Long 1997; Kennedy 2003).

There are many potential dependency traps in my data. For instance, the increasing proportion of democratic states since 1989 rise the question of time dependency.³ Another, and perhaps more important for my analysis, is dependency within states. Since my theoretical framework addresses state attributes as explanations for non-state conflicts, I automatically presume some state-based dependency.

When studying non-state conflicts at the state level, there exist many conceivable dependencies. Conflicts tend to re-occur among the same parties as well as within the same state, leading to both temporal and sectional dependency for the observations. In Mexico, the fighting between the Gulf Cartel and Sinaloa Cartel occurred in 2004, 2005 and 2008. Obviously, there exist dependencies among the dyads that make up the counts. Another potential dependency is how clashes between two non-state actors evolve into new warring dyads. For instance, the major fault line in Nigeria is based on religious affiliation. UCDP have recorded a total of six clashed between Christians and Muslims from 1989-2008. When looking more thoroughly into to the Nigerian case, it becomes clear that this is more complex than clashes between different religious groups. Below the surface of Christian and Muslim affiliation, each party represents a myriad of ethnic groups. When clashes between Christian and Muslims are recorded in the UCDP system, they often coincide with fighting between other ethnic groups whom also are recorded within the UCDP system. Certainly there exists some dependency between these dyads and between states.

Since non-state conflicts do not evolve in a vacuum, a time section analysis like mine must address how dependency in the error term potentially violate the models' assumption about a simple stochastic error process. I need to account for both heteroscedasticity and autocorrelation in the error term. By adjusting the variance-covariance matrix I can correct for the potential of temporal and spatial dependencies in the error term. This is often referred to as "robust" standard errors (White 1980).

³See Figure 4.4 in Section 4.3.4.

In Appendix B, Table B.2, B.3 and B.4 I have reported the results from Model 1, Model 2 and Model 3 with robust standard errors.⁴ While applying robust standard errors lead to some loss of accuracy, the substantial interpretations remain the same. Since there is little difference, the choice of reported error becomes rather arbitrary. Based on the examination of the error term, I have chosen to report results in normal standard errors.

There are two additional reasons for doing so as well. Firstly, divergence between normal standard errors and robust standard errors should rise attention as it is likely due to misspecification of the model (King and Roberts 2012). Secondly, falsification strictly based on p-values is neither a good option. Since the inference from the p-values is based on the potential of drawing a new sample, the logic does not apply to my analysis. I cannot simply draw a new sample of non-state conflicts.⁵ The p-values from a model reporting 0.05 or 0.09 is of minor importance. Hence, I have reported values in normal standard errors and tried to provide discussions based on more substantial terms like: direction, effect and uncertainty.

6.1.3 Influential Observations

When interpreting parameter estimates, observations that diverge substantially from the overall pattern may alter the results. This could lead to an exaggerate estimates, hence biased estimates, since a few observations drive the regression slope. It then becomes necessary to inspect whether the data inhabit influential observations. The idea is simply to separate between systematic differences and non-systematic differences. An outlier is an example of the latter. This is the case when an observation inhabits extreme values on the dependent variable, the explanatory variables or both (King, Keohane and Verba 1994). Since the observations I have included diverge much upon the number of counts, the question of influential observations is inevitable.

Compared to linear and logistic regression, there are not as many established procedure for testing influential observations for count regression. While the logistic regression have the Cook's distance to detect poorly predicted cases, there exist no similar test for count models.⁶

⁴More specifically: I have applied the heteroscedastic autocorrelation (HAC) specification found the R-package *sandwich* to adjust the variance- covariance matrix. From the matrix returned, I have calculated new, standard errors that account for heteroscedasticity and autocorrelation in the error term. A more detailed review of the HAC estimator (and other variance- covariance adjustments) can be found in Zeileis (2004, 2006)

⁵The phenomena of focusing on p-values have been heavily criticized by scholars like Ward, Greenhill and Bakke (2010). Instead of focusing strictly on p-values, they suggest to focus on signs of coefficients, their effect and the uncertainty attached to the estimate.

⁶This is based on comparing robustness checks commonly used within the *social sciences*. I do by no

When trying to find the badly predicted observations, other tools can be applied. My solution is to perform a sensitivity analysis of respective states' influence on parameter estimates. Compared to Cook's distance, this way of detecting influential observations depends on divergence in the explanatory variable whereas Cook's method hinges on divergence in the dependent variable. It is a local way of addressing influence, whereas looking at influence on the dependent is global (Fox and Weisberg 2011; Wang, Puterman, Cockburn and Le 1996).

Since bureaucratic quality is my strongest predictive, I have chosen to perform a sensitivity analysis on this variable. The analysis is performed by estimating the model as many times as there is observations in the data. Each estimation is done by dropping the i -th case from the data set. The results returned are the i -th element's influence on the explanatory. In my case, there are two possible approaches. Either can I perform the analysis on the total number of 2904 observations, or I can restrict it to the 151 states included. Since non-state conflicts have a tendency to reoccur within the same states, I will adopt for an approach where I drop states.

Figure 6.1 shows the respective states' influence on the bureaucratic quality parameter. From the figure we can see that some states diverge from the overall pattern. These states are: Iraq, Kenya, Lebanon, Somalia, South Africa, Sudan and Uganda. It means that their relative leverage on the parameter estimate of bureaucratic quality diverge non-systematically when compared to the other states.

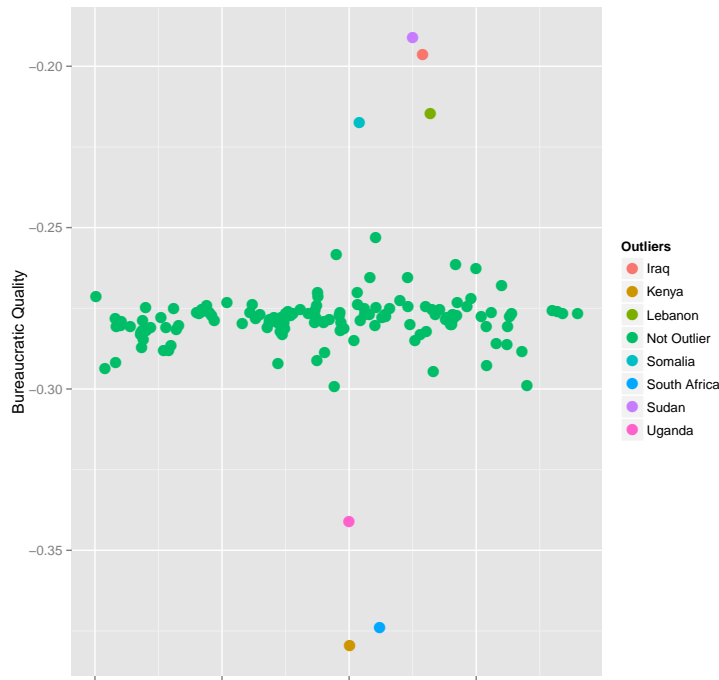
In order to test whether these seven specific observations drive my estimates, I have re-run the analysis by excluding them. The estimates from these analysis are found in Appendix B, Table B.11. When I remove the outliers from the analysis, the effect of bureaucratic quality is weakened and its uncertainty risen. This is true for the models including state collapse and direction of regime change. For the model that does not emphasis the direction of change, the estimate is still significant at the 10% level.

What is interesting about the results in Table B.11, are the sudden significance of the regime change indicator.⁷ Not proving any leverage in any of the other analysis, regime per se suddenly crosses the 10% significance level. Further, the effect of autocratization is both

means reject the fact that within the field of statistics there exist such tests. However, within the sub-field of research methods for social sciences there exist plenty of literature addressing model robustness checks for linear and logistic regression (See eg. Maddala 1983; Long 1997; Hosmer and Lemeshow 2000; Greene 2008). Unfortunately, the same cannot be said for count regression.

⁷I have also re-run the conditional models to check whether the exclusion of the seven states alter the conditional parameters. The findings from these analysis are found in Appendix B, Table B.12. The re-estimation of the models corresponds to the previous rejection of a conditional relationship between regime change and bureaucratic quality.

Figure 6.1: Sensitivity analysis of states' impact on the parameter estimate of bureaucratic quality



increased and its accuracy as well. While Hypothesis $H2$ about bureaucratic and administrative state capacity have lost some leverage, the Hypothesis $H3b$ about autocratization is strengthened.

There is one issue with deleting these seven cases that is rather problematic. When summarizing their total counts on the dependent variable, I get the number of 243. This means that roughly 40% of the variation in the dependent variable is lost by excluding these seven countries. A robustness test suggesting a deletion of a set of states known to be the stereotype context for non-state conflicts should make the alarm go off. The enormous deletion of counts brings up the question to which extent these observations should be treated as outliers. They could simply be a manifestation of normality within the phenomena. While non-state conflicts in general is a rare phenomenon, it could be questioned whether the seven states are not so extreme when compared to other states where non-state conflicts actually occurs.⁸

⁸See Section 4.2, Figure 4.1.

6.2 Alternative Specifications and Estimation Methods

While I in the previous section assessed the internal structure of my models, I will in this section go beyond the original model itself. It is somewhat an expansion of the research design. If results are consistent across various model specifications, the theoretical argument will be strengthened.

6.2.1 Alternative Operationalizations

As mentioned in the start of the research design chapter, there exist only one comprehensive data source for non-state conflicts. This makes an alternative measure of the dependent variable impossible. In my framework I have two three main explanatory variables, namely: bureaucratic and administrative state capacity, representative institutions, and regime change.

Half Time Function of Regime Change

In the research design I addressed how an indicator of regime change needs to account for proximity to last change. To account for the time effect of consolidation and regime change, I have included an exponential decay function as an alternative specification of regime change.⁹ When I estimate the models with the half time of one year, results correspond to my prior findings and suggestions. When regime change incorporate periods without a governing body, the risk of non-state conflicts increases.

In my discussion of the results I questioned a causal path between non-state conflicts and autocratization. After looking more thoroughly into the relationship I found the slightly significant negative coefficient to be related to other factors despite dis-satisfied actors provided with an opportunity of violent solutions. In particular I found that the states recorded with simultaneous deflection of the dependent variable non-state and autocratization had an average of less than 1 year since last regime change. When controlling for the time effect since last regime change, the indicator of autocratization loses its significance. This certainly leads to a rejection of Hypothesis *H3b*, giving autocratization no leverage as an explanation of non-state conflicts. Result from the analysis with the decay function are found in Appendix C, Table C.2.

⁹The operationalization of this indicator is found in Section 4.3.5.

Regime Change of Representative Institutions

Since my conceptualization state capacity hinges on a separation from the input side of politics, many indicators of state capacity is dismissed as they include measures of political institutions. Of course, this relates to the elusiveness of the concept and its different interpretations among scholars. In some studies, the Polity Index has been used as a measure of state capacity. This is what Fjelde and Nilsson (2012) do in their study of in-fighting in civil wars. They use the Polity Index as a measure of disintegrated political authority, hence an indicator of state weakness. Since my indicator of representative institutions and regime changes origins from the Polity Index, further usage of Polity Index is dismissed. Since it is hard to find an indicator that does not include the input side of politics, I will proceed by focusing on an alternative specification of the representative institution and regime changes.

As an alternative indicator of representative institutions and regime change I have opted for the dichotomous measure democracy - autocracy measure by Alvarez et al. (1996). As I earlier have argued that I would have preferred a continuous measure of representative institutions, I am curious to see whether the dichotomous indicator is able to explain variation in the dependent variable. Since this measure is somewhat more restrictive, significant result will give enormous leverage to theoretical arguments.

As an alternative indicator of representative institutions and regime change I have opted for the dichotomous measure democracy - autocracy measure by Alvarez et al. (1996). As I earlier have argued that I would have preferred a continuous measure of representative institutions, I am curious to see whether the dichotomous indicator is able to explain variation in the dependent variable. Since this measure is somewhat more restrictive, significant result will give enormous leverage to theoretical arguments.

Named after the authors initial, I use the ACLP index to proxy representative institution and regime change. Compared to the SIP index, this indicator provides classification of political according to four criterions. To be record as a democracy, all four rules have to be passed. The rules are: (1) The chief executive must be chosen by popular election or by a body that was popular elected, (2) the legislature must be popular elected, (2) there must be more than one party competing in elections and (4) An alteration in power under electoral rules identical to the ones that brought the incumbent to office must have taken place (Alvarez et al. 1996, pg. 69). Regime is coded as change in the ACLP index with a one year lag structure.

Table C.1 in Appendix C shows the results from the estimations with the ACLP index as an

alternative specification of representative institution and regime change. Compared to the SIP-index, this measure has no way of indicating cases of state collapse. This means that I have no indicator comparable to the state collapse indicator.

What I find from using the ACLP index is how representative institutions suddenly becomes a major predictive of non-state conflicts. States crossing the ACLP democratic threshold are less at risk than autocratic regimes. The effect of this indicator is very strong, even stronger than for indicator for income level. In interpret the divergence in findings as a manifestation of the complex and intervened the relationship between representative institutions. For the indicator of bureaucratic quality, the same result are the roughly the same as in former models. It is still a strong predictor of conflicts.

When it comes to regime change, the ACLP index does not find any relationship. To some extent, I am not surprised by this result. Since the ACLP index is more restrictive than the SIP index, the failure to find a relationship was to some degree was expected. I have also estimated the model using an exponential decrease function based on halftime since last change in the ACLP index. This slightly change in the ACLP indicator does not alter any results. I have also estimated the model by including the interaction term between transition and bureaucratic quality. The result from the conditional model speaks in favor of a rejection of the conditional hypothesis. While there seem to be a negative conditional relationship between bureaucratic quality and autocratization, this relationship is dismissed by performing a log-likelihood test between Model 1 and Model 4. The test rejects Model 4 as significant better than Model 1.¹⁰

Civil War Revisited

Due to the fear of co-linearity I chose to leave out civil war as a control in my analysis. In particular I feared the overlap between the SIP index' measure of interregnum period as this often include cases of civil wars. There are two reasons why civil war should be included in an investigation of non-state conflicts. Firstly, in the shadow of a civil war, the security threat becomes even more evident. State busy fighting rebels, or a state evaporated, will be a context where protection has to be privately supplied. Secondly, when investigating non-state conflicts, the presence of other armed conflicts will often involve non-state agents. According to Kalyvas (2003), an intergraded understanding of conflicts has to start with approaching the phenomena as a complex process involving multiple actors with both joint and diverse

¹⁰As many model specifications are place consuming I have chosen to not report results addressing proximity to change or the log-likelihood test.

goals. Until now, I have only addressed violence between non-state actors. This approach have a rather static view of conflicts, assuming that conflict between non-state actors can be studied without the inclusion of state based conflicts.

To control for civil war, I use a dummy variable taken from UCDP's Armed Conflict Dataset (Themnér and Wallensteen 2013). The variable has the threshold of 25 annual battle related deaths. In order to discriminate between the effect of regime change and civil war have I lagged the civil war indicator by five years. This increases the potential of discrimination between the effect of regime change and civil war on the dependent.

In Appendix C, Table C.7 I have included civil war as a control. Despite its effect and significance, its inclusion does not alter the relationship between the dependent and the explanatory variables put forth.

6.2.2 Sub-Samples by Organization Level and Region

Sub-sample From Asia and Africa

Since non-state conflicts have their biggest share in African and Asian countries, I have estimated a model using sub-samples from these regions. Results from these models can be found in Appendix B, Table C.3 and Table C.4.

In the African sub-sample, the results from the main analysis are confirmed. Variables behave identically, giving leverage to the indicators of bureaucratic quality and state collapse. Democratization has a negative impact on non-state conflicts and autocratization leads to an increase. Once again, these estimates have a high degree of uncertainty attached to them, making conclusions highly speculative.

I have chosen to include the Middle East countries in my Asian sub-sample. I am clearly aware of the major difference between these regions, but both regions are alone too small to estimate an efficient negative binomial model. I have therefor chosen to collapse them. For bureaucratic quality and state collapse, the relationships are once again confirmed. Bureaucratic quality decreases the risk of non-state conflicts and state collapse increases the risk. For two estimates, the Asian sub-sample diverges from the global estimates. GDP per capita loses its explanatory power while representative institution becomes significant.

I interpret this finding due to the somewhat extra ordinary situation in the Middle Eastern oil countries. Compared to other states, these states are characterized by a historic legacy

of armed conflict combined with unusual high levels of income. Oil money feeds the national treasury with capital.¹¹ Compared to Western states where high levels of income are accompanied by high levels of representative institutions, the same is not true for the Asian case. States like Saudi- Arabia, Oman, Yemen and Iraq have high a level of national income, but also a lack of political openness. The same is to some extent also true for the emerging Asian economies. States like Singapore, China, South Korea, and Taiwan had an exceptionally high growth rate until the mid-1990s. Despite the opening of Taiwan and South Korea in the mid-1990s, China and Singapore still remain closed. While there exist other potential explanations for why the Asian results diverge from the global results, the divergence between political openness and economic development strikes me as the most obvious explanation.

Sub-samples From Rebel Conflicts and Communal Conflicts

Results based on a division between rebel groups and communal groups, are found in Appendix B, table C.5 and table C.6.

The rebel sub-sample all the explanatory variables put forth behave like expected. They serve to confirm the results from the global sample. For the communal sub-sample none of the explanatory variables put forth are significant. While I initially argued for an approach where conflicts between communal groups and rebel groups could be collapses, the results from the communal sub-sample questions my choice. The results clearly tell a story of different dynamics between conflicts involving rebel groups and conflicts involving communal groups.

I have drawn the theoretical arguments regarding regime change and communal conflicts from Kreutz and Eck (2011). In their study, they find support for an increased risk of fighting between communal groups in the wake of regime changes. This diverging result requires an explanation. Compared to their study, I have applied much stricter inclusion criteria for communal conflicts. The indicator used by Kreutz and Eck (2011, pg. 8) include a lower number of annual threshold (one single fatality), events where there exist a higher degree of uncertainty about exactly which communities were included and events which can be accounted as one-sided violence.

To some extent, my result cast doubt over the finding of Kreutz and Eck. If communal

¹¹Within the broader literature, the link between oil and conflict is well known (See eg Grossman 1991; de Soysa 2000, 2002; Collier and Hoeffler 2004; Ross 2004*a,b*). While many of the Middle Eastern conflicts are oil related, I will not approach a further examination of the link between oil and armed conflict. For my thesis, oil will solely be addressed through its impact on states' income levels.

violence is conceptualized as violence between organized groups, my results indicates no relationship between regime change and communal conflicts. There is one additional problem with the results from Kreutz and Eck (2011). For regime change, they have used to Polity Index. This is problematic as one of the sub-indicator measuring participation has an explicit reference to political violence in the coding rules (Gleditsch, Hegre and Strand 2009; Vreeland 2008).

6.2.3 Alternative Estimations

In Appendix B, Table B.10 have I estimated a Hurdle model. Compared to zero inflated models, the assumptions regarding the Hurdle model are different. Zero inflated models assume that non-occurrences can be due to both chance (sampling) and structures in the data. A Hurdle model assumes zero counts totally due to structures and not by chance. The zero is then estimates separately from the positive counts.

From the Hurdle model, bureaucratic quality is significant for both the count estimates and the zero estimates. For those observations crossing the zero- threshold, state collapse seem no longer to be relevant. This somewhat alters the results as I have put forth a theory where state collapse leads to several occurrences of non-state conflicts. The Hurdle model suggest state collapse matters for states going from zero to more than one count. But, after crossing the threshold of one count, state collapse is no longer significant.

From the Hurdle model it becomes less clear whether a count model or binary model is the most appropriate. If the count model were to be the right choice, all variables from the count model should be significant in the count-part of the Hurdle model. In my case, only bureaucratic quality is.

6.3 Summary

This have somewhat been a trial of strength for my results. When using different indicators, some expectation have been strengthen, while others have lost their explanatory power.

The only hypothesis proving to be robust is the Hypothesi *H2*. Bureaucratic and administrative state capacity is consistent and robust across all model.¹² For the other explanatory

¹²The analysis with removal of outliers is not. I have discussed this result, concluding that the outliers also represent normality within the data

CHAPTER 6. MODEL DIAGNOSTICS AND ROBUSTNESS

variables, this chapter gives a mixed report. The expectations regarding representative institutions have been given a renaissance. By using a more crude measure, representative institutions become significant. For regime change, I find no results after controlling for proximity to change.

One important lesson learned from the robustness test is the loss of nuances when collapsing categories and applying theories to a global sample. Non-state conflicts have different dynamics depending on regional context and type of actors involved.

Chapter 7

Conclusion

This thesis has set out to explain whether the great variation in non-state conflicts across states can be explained by state attributes. This approach has been justified upon the prominent voice of scholars claiming state attributes as the initial source of grievance and inequality between groups. Based on this claim I have suggested a relationship where representative institutions and bureaucratic and administrative state capacity are importance determinants for the structural conditions non-state conflicts erupt within. A state with non-representative institution and a weak bureaucracy provide an environment where non-state conflicts become likely. Since state attributes solely address the contextual settings making non-state conflicts more or less likely, I have complimented the theoretical framework with expectations regarding opportunity and motivation. For non-state actors seeking to increase their leverage, a regime change will provide both opportunity and motivation.

In the following I give a discussion of the findings and non-findings before I finally address the limitations and implications regarding the results.

7.1 Findings and Non-Findings

Results from my analysis have led to both rejections and confirmations of the expectations derived. In particular have bureaucratic and administrative state capacity proved to a robust indicator of non-state conflicts. For representative institutions, the record is mixed as the main analysis and robustness test diverge. For the set of expectations regarding regime change, only state collapse proves to be significant. When anarchy emerges, conflict between non-state actors increases. When incorporating direction of regime change, there is a slightly

tendency for democratization to decrease non-state conflicts and autocratization to increase them. These tendencies have a high degree of uncertainty attached, making conclusion only tentative. For the conditional hypothesis regarding bureaucratic and administrative state capacity and regime change, I fail to find a relationship.

Hypothesis *H1* expected states with representative political institutions to have less non-state conflicts because they inhabit incentives to reduce and solve grievance between groups. From the main analysis, this relationship was rejected. When tested against other explanations, representative institutions had little to offer. As mentioned in the summary following the discussion of the results, I was somewhat reluctant to dismiss representative institutions as an explanation for non-state conflicts. The relationship between economic development, institutional structures and representative institutions are known to be complex. For instance, it is highly plausible to believe an existence of democratic hidden legacy in the indicators of income and bureaucratic quality. While the representative institutions proved to be insignificant, a complete rejection of its significance seemed both premature and radical. In the robustness test, this was revisited. Depending on choice of indicators, and the sample exposed, representative institutions might be an explanation of non-state conflicts.

Hypothesis *H2* expected states with high bureaucratic and administrative state capacity to have less non-state conflicts. Hypothesis *H2* has been confirmed and proves to be robust across all my analysis. There are two theoretical interpretation of this. The first relates to states ability to govern, and the second relates to how groups encompass their security. While representative institutions equip states with good intensions, intensions alone do not translate into conflict reducing behaviors. Execution of policies hinge upon bureaucratic and administrative state capacity. States seeking to prevent disorder and restore order have a better chance to fulfill their missions when equipped with a functioning bureaucracy. It enables states to acquire information about their citizens. This is not only central for detection of rebel movements, but also to gives government information about problems and grievances within the broader population. This makes governance dependent upon bureaucratic and administrative state capacity.

For groups, bureaucratic and administrative state capacity relates to their interpretation of security. Whereas a functioning bureaucracy have the ability to provide security, *if* the state chooses to do so, a malfunctioning bureaucracy fails. A malfunctioning bureaucracy is defined by the lack of political independence, the temporal stop of services during changes, lack of day-to day routines and patrimonial procedures. In providing security, this type either fails or it becomes a threat to security itself. When state agents no longer constitute a trustworthy provider of security, security has to be provided from another source. Security provided by

CHAPTER 7. CONCLUSION

group belonging is then the most relevant source. This leads to the armament of multiple non-state actors and a shift in the regulation of violence from state-based to privately-based.

For regime change, I put forth a set of hypotheses. Together they addressed regime change per se, direction of change and a conditional relationship between regime change bureaucratic quality. While I fail to find a general relationship between non-state conflicts and regime change, I find a strong relationship when allowing the indicator of regime to include cases of state collapse. Year to year changes between political regimes cannot explain non-state conflicts, but long periods without a governing body does. This gives some support to Hypothesis *H3a*, which expected a general conflict increasing effect of regime change.

Civil wars are often followed by a lack of central authority. It is a situation characterized by chaos and disorder. The period leading up to state collapse is often recognized by conflicts of interest. Since these conflicts do not disappear by the disintegration of an old regime, a state collapse will be situation filled with unsolved conflicts. State collapse will often bring a power vacuum. The implication of a state collapse is the complete absence as state agents as providers of security. From this it follows naturally that protection must come from another source than the state. Since power is not settled, non-state actors will fight over government power. Together, this adds up to an increase in non-state conflicts.

The mechanism related to regime change was motivation and opportunity. Regime change tends to temporally (or completely) set aside the state's ability to govern. It represents a critical conjuncture for actors seeking political leverage. When states are on the verge of collapse, rebels groups have incentive fight each other off in order to arrive as sole victors when a new government is constituted. For those not seeking government office, the mechanism leading to armament is the security dilemma.

For direction of change, the relationship is not strong enough to confirm any of the hypotheses. Hypothesis *H3b* expected an increase in non-state conflicts by autocratization. For democratization I put forth competing expectations. Hypothesis *H3c* expected an increase in non-state conflicts and Hypothesis *H3d* a decrease. I find a tendency for non-state conflicts to increase during autocratization and decrease during democratization. Since all these estimates have a high degree of uncertainty attached, it leads to a rejection of all the directional hypotheses. While they originally proved significance at the 10% level, the effect disappears when exposed to robustness tests. Despite this, I will give a small elaboration based on their direction and uncertainty.

After scrutinizing the results, a causal relation between autocratization and non-state conflicts is rejected. The narrowing of the political sphere does not lead to a situation where

groups signal disloyalty to the new regime by policing another group. Most of non-state conflicts displayed in the wake of an autocratization existed beyond the autocratization itself.

I proposed two competing hypotheses for democratization, based on how different socio-economic starting points would lead to more or less resistance from the governing regime. For democratic transition I find a tendency for non-state conflicts to decrease. When looking more thoroughly into these cases where conflict erupted in the wake of transition and when it did not, the negative estimate might be due to the favorable conditions these countries exhibit.

For the conditional hypothesis, Hypothesis H_4 , I fail to find a relationship. My explanation for this is twofold. Firstly, the result could indicate a non-existence of conditional effect. Secondly, bureaucratic and administrative state capacity as a concept is too broad to capture a conditional effect concerning regime change. Since the aspect involves more dimension than just the ability to govern through changes, a plausible explanation could be related to leverage of each aspect. Unfortunately I do not have the ability to decompose the dimension of bureaucratic and administrative state capacity. As for now, a conditional relationship is rejected.

7.2 Limitations and Implications

There are some limitations in this study. While the expectations derived are universal, the application of a global mean and the collapse of categories lead to a loss of nuances. For instance, there are many states included here which do not inhabit the characteristics associated with conflicts. In my analysis I have compared Sweden with Sudan. The estimates will be the global effect, which might not reflect any of these countries. Results based on sub-samples by region and type of non-state conflict gave different results. This is the major drawback by an all-inclusive approach. Non-state conflicts have different dynamics depending on regional context and type of actors involved.

My study has only looked at explanations related to the state level. This makes my approach somewhat limited. I have not included any measures at the group level. My approach has been entirely structural, where I have focused on the context and conditions which makes states more or less exposed for non-state conflicts. Although I find state attributes of importance, incorporating measures at group level would have been ideal.

The implications from this study are drawn from the findings of bureaucratic quality and

CHAPTER 7. CONCLUSION

representative institutions. Since these both decrease the risk of non-state conflicts, attempts to improve them should be met. Improvement of representative institutions implies democratization, a process which should be taken upon with caution. While I find a tendency for non-state conflicts to decrease by democratization, these are only in the cases where countries exhibit favorable conditions for democratization.

7.2. LIMITATIONS AND IMPLICATIONS

Bibliography

- Acemoglu, Daron and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.
- Achen, Christopher H. 2005. "Let's Put Garbage-Can Regressions and Garbage-Can Probits Where They Belong." *Conflict Management and Peace Science* 22(4):327–339.
- Adcock, Robert and David Collier. 2001. "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research." *American Political Science Review* 95(3):529–546.
- Alesina, Alberto and R. Perotti. 1996. "Income Distribution, Political Instability and Investment." *European Economic Review* 40(6):1203–1228.
- Alvarez, Mike, José Antonio Cheibub, Fernando Limongi and Adam Przeworski. 1996. "Classifying political regimes." *Studies in Comparative International Development* 31(2):3–36.
- Bakke, Kristin M, Kathleen Gallagher Cunningham and Lee JM Seymour. 2012. "A plague of initials: Fragmentation, cohesion, and infighting in civil wars." *Perspectives on Politics* 10(2):265–283.
- Barnett, Jon. 2000. "Destabilizing the environment—conflict thesis." *Review of International Studies* 26(02):271–288.
- Barnett, Jon. 2001. "Adapting to climate change in Pacific Island Countries: The problem of uncertainty." *World Development* 29(6):977–993.
- Barron, Patrick, Kai Kaiser and Menno Pradhan. 2009. "Understanding variations in local conflict: Evidence and implications from Indonesia." *World Development* 37(3):698–713.
- Bates, Robert. 2008. *When Things Fell Apart. State Failure in Late-Century Africa*. New York: Cambridge University Press.

- Beck, Nathaniel and Richard Tucker. 1998. Democracy and Peace: General Law or Limited Phenomenon? In *Annual Meeting of the Midwest Political Science Association*. Chicago, IL: .
- Benjaminsen, Tor A. 2008. "Does Supply-Induced Scarcity Drive Violent Conflicts in the African Sahel? The Case of the Tuareg Rebellion in the Northern Mali." *Journal of Peace Research* 45(6):819–836.
- Bollen, Kenneth. 1993. "Liberal Democracy: Validity and Method Factors in Cross-National Measures." *American Journal of Political Science* 37(4):1207–1230.
- Brambor, Thomas, William R. Clark and Matt Golder. 2005. "Understanding Interaction Models: Improving Empirical Analysis." *Political Analysis* 14(1):63–82.
- Brass, Paul R. 1991. *Ethnicity and nationalism: Theory and comparison*. Sage Publications (CA).
- Brass, Paul R. 1997. *Theft of an idol: Text and context in the representation of collective violence*. Princeton University Press.
- Brass, Paul R. 2003. *The production of Hindu-Muslim violence in contemporary India*. University of Washington Press.
- Bratton, Michael. 2006. "State Building and Democratization in Sub-Saharan Africa. Forwards, Backwards, or Together?" *Comparative Political Studies* 39(9):1059–1083.
- Brosché, Johan. 2008. "Darfur: dimensions and dilemmas of a complex situation."
- Brosche, Johan and Emma Elfvérsson. 2012. "Communal conflict, civil war, and the state: Complexities, connections, and the case of Sudan." *African Journal on Conflict Resolution* 12(1):9–32.
- Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson and Alastair Smith. 1999. "An Institutional Explanation of the Democratic Peace." *American Political Science Review* 93(4):791–807.
- Buhaug, Halvard, Kristian S. Gleditsch, Helge Holtermann, Andreas F. Tollefsen and Gudrun Østby. 2011. "It's the Local Economy, Stupid! Geographic Wealth Dispersion and Conflict Outbreak Location." *Journal of Conflict Resolution* 55(5):841–840.
- Carey, Sabine C, Neil J Mitchell and Will Lowe. 2013. "States, the security sector, and the monopoly of violence: A new database on pro-government militias." *Journal of Peace Research* 50(2):249–258.

BIBLIOGRAPHY

- Carter, David B. and Curtis S. Signorino. 2010. "Back to the Future: Modeling Time Dependence in Binary Data." *Political Analysis* 18(3):271–292.
- Casper, Gretchen and Claudiu Tufis. 2003. "Correlation Versus Interchangeability: The Limited Robustness of Empirical Findings on Democracy Using Highly Correlated Data Sets." *Political Analysis* 11(2):196–203.
- Cederman, Lars-Erik, Andreas Wimmer and Brian Min. 2010. "Why do ethnic groups rebel? New data and analysis." *World Politics* 62(1):87–119.
- Cederman, Lars-Erik, Brian Min and Andreas Wimmer. 2009. "Ethnic Power Relations dataset." .
URL: <http://hdl.handle.net/1902.1/11796> UNF:5:k4xxXC2ASI204QZ4jqvUrQ== V1
- Cederman, Lars-Erik, Kristian Skrede Gleditsch and Nils B. Weidmann. 2010. "Horizontal Inequalities and Ethno-Nationalist Civil War: A Global Comparison." Typescript, ETH Zurich.
- Cederman, Lars-Erik, Nils B. Weidmann and Kristian S. Gleditsch. 2011. "Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison." *American Political Science Review* 105(3):478–495.
- Cederman, Lars-Erik, Simon Hug and Lutz F. Krebs. 2010. "Democratization and civil war: Empirical evidence." *Journal of Peace Research* 47(4):377–394.
- Cheibub, Jose, Jennifer Gandhi and James Vreeland. 2010. "Democracy and dictatorship revisited." *Public Choice* 143:67–101.
- Collier, David and Robert Adcock. 1999. "Democracy and dichotomies: A pragmatic approach to choices about concepts." *Annual Review of Political Science* 2(1):537–565.
- Collier, Paul. 1999. "On the Economic Consequences of Civil War." *Oxford Economic Papers – New Series* 51(1):168–183.
- Collier, Paul and Anke Hoeffler. 1998. "On the Economic Causes of Civil War." *Oxford Economic Papers* 50(4):563–573.
- Collier, Paul and Anke Hoeffler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56(4):563–595.
- Cornell, Svante E. 2001. "Democratization falters in Azerbaijan." *Journal of Democracy* 12(2):118–131.

CSR. 2010. "Polity IV Country Report 2010." Center for Systematic Peace.

URL: <http://www.systemicpeace.org/p4creports.html>

Cunningham, David E, Kristian Skrede Gleditsch and Idean Salehyan. 2009. "It Takes Two A Dyadic Analysis of Civil War Duration and Outcome." *Journal of Conflict Resolution* 53(4):570–597.

Cunningham, Kathleen Gallagher. 2013. "Actor Fragmentation and Civil War Bargain: How Internal Division Generate Civil Conflict." *American Journal of Political Science* 57(3):659–672.

Cunningham, Kathleen Gallagher, Kristin M. Bakke and Lee J. M. Seymour. 2012. "Shirts Today, Skins Tomorrow : Dual Contests and the Effects of Fragmentation in Self-Determination Disputes." *Journal of Conflict Resolution* 56(1):67–93.

Dahl, Robert A. 1971. *Polyarchy: Political Participation and Opposition*. New Haven: Yale University Press.

Davies, James C. 1962. "Towards a Theory of Revolution." *American Sociological Review* 27(1):5–19.

de Soysa, Indra. 2000. The Resource Curse: Are Civil Wars Driven by Rapacity or Paucity? In *Greed and Grievance: Economic Agendas in Civil Wars*, ed. Mats Berdal and David M. Malone. Boulder, CO and London: Lynne Rienner pp. 113–135.

de Soysa, Indra. 2002. "Paradise is a Bazaar? Greed, Creed, and Governance in Civil War, 1989–99." *Journal of Peace Research* 39(4):395–416.

DeRouen, Karl and David Sobek. 2004. "The Dynamics of Civil War Duration and Outcome." *Journal of Peace Research* 41(3):303–320.

Duffield, Mark. 1998. "Post-modern conflict: Warlords, post-adjustment states and private protection." *Civil Wars* 1(1):65–102.

Eckstein, Harry. 1973. "Authority Patterns: A Structural Pattern for Inquiry." *American Political Science Review* 67(4):1142–1161.

Ellingsen, Tanja. 2000. "Colorful Community or Ethnic Witches' Brew? Multiethnicity and Domestic Conflict During and After the Cold War." *Journal of Conflict Resolution* 44(2):228–249.

BIBLIOGRAPHY

- Ellis, Stephen. 1995. "Liberia 1989-1994: A Study of Ethnic and Spiritual Violence." 94(375):165–197.
- Fearon, James D. and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(1):75–90.
- FHI. 2014. "Freedom in the World 2014 Methodology." Freedom House.
URL: <http://www.freedomhouse.org/sites/default/files/Methodology%20FIW%202014.pdf>
- Fjelde, Hanne and Desiree Nilsson. 2012. "Rebels Against Rebels: Explaining Violence Between Rebel Groups." *Journal of Conflict Resolution* 56(4):604–628.
- Fjelde, Hanne and Gudrun Østby. 2014. "Economic Inequities and Non State Conflicts in Africa." *International Interactions* Forthcoming.
- Fjelde, Hanne and Indra de Soysa. 2009. "Coercion, Co-optation or Cooperation? State Capacity and the Risk of Civil War, 1961–2004." *Conflict Management and Peace Science* 26(1):5–25.
- Fjelde, Hanne and Nina von Uexkull. 2012. "Climate triggers: Rainfall anomalies, vulnerability and communal conflict in Sub-Saharan Africa." *Political Geography* 31(7):444–453.
- Fox, John and Sanford Weisberg. 2011. *An R companion to applied regression*. Sage.
- Frank, Elke. 1966. "The Role of Bureaucracy in Transition." *The Journal of Politics* 28(04):725–753.
- Galtung, Johan. 1969. "Violence, Peace, and Peace Research." *Journal of Peace Research* 6(3):167–191.
- Gartzke, Erik. 2007. "The Capitalist Peace." *American Journal of Political Science* 51(1):166–191.
- Gates, Scott, Håvard Hegre, Mark P. Jones and Håvard Strand. 2006. "Institutional Inconsistency and Political Instability: Polity Duration, 1800–2000." *American Journal of Political Science* 50(4):893–908.
- Geddes, Barbara. 2009. "How Autocrats Defend Themselves Against Armed Rivals." APSA 2009 Toronto Meeting Paper.
URL: <http://www.sscnet.ucla.edu/polisci/cpworkshop/papers/geddes2.pdf>
- Gleditsch, Kristian S. and Michael D. Ward. 1999. "A Revised List of Independent States since the Congress of Vienna." *International Interactions* 25(4):393–413.

- Gleditsch, Kristian S. and Michael D. Ward. 2000. "War and Peace in Space and Time: The Role of Democratization." *International Studies Quarterly* 44(1):1–29.
- Gleditsch, Kristian Skrede and Andrea Ruggeri. 2010. "Political opportunity structures, democracy, and civil war." *Journal of Peace Research* 47(3):299–310.
- Gleditsch, Nils Petter, Håvard Hegre and Håvard Strand. 2009. Democracy and Civil War. In *Handbook of War Studies III*, ed. Manus Midlarsky. Ann Arbor, MI: University of Michigan Press pp. 155–192.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Håvard Strand. 2002. "Armed Conflict 1946–2001: A New Dataset." *Journal of Peace Research* 39(5):615–637.
- Goodwin, Jack and Theda Skocpol. 1989. "Explaining Revolutions in the Contemporary Third World." 17(4):489–509.
- Greene, William H. 2008. *Econometric Analysis*. 6th ed. Upper Saddle River, NJ: Pearson.
- Grossman, Herschell I. 1991. "A general equilibrium model of insurrections." *The American Economic Review* 81(4):912–921.
- GROWup. 2014. "Codebook, GROWup Research Front-End." Swiss Federal Institute of Technology, Zurich: The GROWup Research Front-End.
URL: <http://growup.ethz.ch/rfe/>
- Gurr, Ted. 1968. "A causal model of civil strife: A comparative analysis using new indices." *American Political Science Review* 62(4):1104–1124.
- Gurr, Ted Robert. 1970. *Why Men Rebel*. Princeton, NJ: Princeton University Press.
- Gurr, Ted Robert. 1974. "Persistence and Change in Political Systems, 1800–1971." *American Political Science Review* 68(4):1482–1504.
- Gurr, Ted Robert. 1993. "Why Minorities Rebel: A Global Analysis of Communal Mobilization and Conflict Since 1945." *International Political Science Review* 14(2):161–201.
- Gurr, Ted Robert. 2000. *People Versus States, Minorities at Risk in the New Century*. Washington D.C.: United States Institute of Peace Press.
- Hegre, Håvard. 2014. "Democracy and armed conflict." *Journal of Peace Research* 51(2):000–000.

BIBLIOGRAPHY

- Hegre, Håvard and Håvard Mokleiv Nygård. 2014. "Governance and conflict relapse." *Journal of Conflict Resolution* pp. 1–33.
- Hegre, Håvard and Nicholas Sambanis. 2006. "Sensitivity Analysis of Empirical Results on Civil War Onset." *Journal of Conflict Resolution* 50(4):508–535.
- Hegre, Håvard, Tanja Ellingsen, Scott Gates and Nils Petter Gleditsch. 2001. "Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992." *American Political Science Review* 95(1):33–48.
- Heller, Patrick. 2000. "Degrees of democracy: Some comparative lessons from India." *World Politics* 52(4):484–519.
- Hendrix, Cullen S. 2010. "Measuring State Capacity: Theoretical and Empirical Implication for the Study of Civil Conflict." *Journal of Peace Research* 47(3):271–285.
- Hendrix, Cullen S and Idean Salehyan. 2012. "Climate change, rainfall, and social conflict in Africa." *Journal of Peace Research* 49(1):35–50.
- Heston, Alan and Bettina Aten. 2012. "PWT 7.1." Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.
- Högstrom, John. 2013. "Does the Choice of Democracy Measure Matter? Comparisons between the Two Leading Democracy Indices, Freedom House and Polity IV." *Government and Opposition* 48(2):201–221.
- Homer-Dixon, Thomas. 1999. *Environment, Scarcity, and Violence*. Princeton, NJ: Princeton University Press.
- Homer-Dixon, Thomas F. 1991. "On the Threshold: Environmental Changes as Causes of Acute Conflict." *International Security* 16(2):76–116. file:///R:
- Honaker, James and Gary King. 2010. "What to Do about Missing Values in Time-Series Cross-Section Data." *American Journal of Political Science* 54(3):561–581.
- Horowitz, Donald L. 1985. *Ethnic groups in conflict*. Berkeley, CA: University of California Press.
- Horowitz, Donald L. 1993. "Democracy in Divided Societies." *Journal of Democracy* 4(4):18–38.
- Hosmer, David W and Stanley Lemeshow. 2000. *Applied Logistic Regression. Second Edititon*. New York, NY: Wiley.

- Huntington, Samuel P. 1991. *The Third Wave: Democratization in the Late Twentieth Century*. Norman, OK and London: University of Oklahoma Press.
- Jagers, Keith, Ted Robert Gurr and Monty Marshall. 2012. "Polity IV Project: Political Regime Characteristics and Transitions 1800-2012." .
URL: <http://www.systemicpeace.org/inscr/p4manualv2012.pdf>
- Jenkins, J Craig. 1983. "Resource mobilization theory and the study of social movements." *Annual review of sociology* pp. 527–553.
- Jervis, Robert. 1978. "Cooperation under the Security Dilemma." *World Politics* 30:167–174.
- Kahl, Colin H. 2006. *States, Scaricity and Civil Strife in the Developing World*. Princeton U.
- Kalyvas, Stathis. 2003. "The Ontology of "Political Violence" Action and Identity in Civil Wars." *Perspectives on Politics* 1(3):475–494.
- Kaufmann, Daniel, Aart Kray and Massimo Mastruzzi. 2010. "The Worldwide Governance Indicators. Methodology and Analytical Issues." World Bank Policy Research Working Paper 5430.
- Kennedy, Peter. 2003. *A guide to econometrics*. MIT press.
- King, Gary and Margaret Roberts. 2012. How Robust Standard Errors Expose Methodological Problems They Do Not Fix. In *Annual Meeting of the Society for Political Methodology, Duke University*.
- King, Gary, Michael Tomz and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44(2):347–361.
- King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing Social Inquiry. Scientific Inference in Qualitative Research*. Kindle edition ed. Princeton, NJ: Princeton University Press.
- Knack, Stephen. 2001. "Aid Dependence and the Quality of Governance: A Cross Country Empirical Study." 68(4):310–329.
- Kreutz, Joakim and Kristine Eck. 2011. "Regime transition and communal violence." Paper prepared for the 52nd International Studies Association conference, Montreal, 16-19 March 2011.

BIBLIOGRAPHY

- Lichbach, Mark I. 1989. "An Evaluation of Does Economic-Inequality breed Political-Conflict studies." *World Politics* 41(4):431–470.
- Linder, Anja, Carlos Santiso and Frederic Neumann. 2002. "Assessing The Predictive Power Of Country Risk Ratings And Governance."
- Linz, Juan J. 1975. "Totalitarian and authoritarian regimes." *Handbook of political science* 3:175–411.
- Lipset, Seymour Martin. 1959. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review* 53(1):69–105.
- Long, Scott J. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Advanced Quantitative Techniques in the Social Sciences Thousand Oaks, London and New Dehli: Sage Publications.
- Maddala, G. S. 1983. *Limited Dependent and Qualitative Variables in Econometrics*. Cambridge, MA: MIT Press.
- Mancini, Luca. 2005. "Horixontal Inequality and Communal Violence: Evidence from Indonesian Districts." CRISE Working Paper No. 22, November 2005.
URL: <http://www3.geh.ox.ac.uk/pdf/crisewps/workingpaper22.pdf>
- Mansfield, Edward D. and Jack Snyder. 1995*a*. "Democratization and the Danger of War." *International Security* 20(1):5–38. file://R:
- Mansfield, Edward D. and Jack Snyder. 1995*b*. "Democratization and War." *Foreign Affairs* 74(3):79–97.
- Mansfield, Edward D. and Jack Snyder. 2005. *Electing to Fight. Why Emerging Demcoracies Go to War*'. Cambridge, MA and London: MIT Press.
- Mansfield, Edward D. and Jack Snyder. 2009. "Pathways to War in Democratic Transitions." *International Organization* 62(2):381–390.
- Marshall, Monthy G., T. R. Gurr and K. Jaggers. 2010. "Polity IV Project: Political Regime Characteristics and Transitions, 1800-2009."
- Mason, David T., Joseph P. Jr. Weingarten and Patrick J. Fett. 1999. "Win, Lose or Draw: Predicting the Outcome of Civil Wars." 52(2):239–268.
- Meier, Patrick, Doug Bond and Joe Bond. 2007. "Environmental Influences on Pastoral Conflict in the Horn of Africa." *Political Geography* 26(6):716–735.

- Miguel, Edward, S. Satyanath and E Serengeti. 2004. "Economic Shocks and Civil Conflict: An Instrumental Variables Approach." *Journal of Political Economy* 112(4):725–753.
- Minorities at Risk Project. 2009. "Minorities at Risk Dataset." College Park, MD: Center for International Development and Conflict Management.
URL: <http://www.cidcm.umd.edu/mar/>
- Mitchell, Neil J., Sabine C. Carey and Christopher K. Butler. 2014. "The Impact of Pro-Government Militias on Human Rights Violations." *International Interactions* Forthcoming.
- Mousseau, Michael. 2000. "Market Prosperity, Democratic Consolidation, and Democratic Peace." *Journal of Conflict Resolution* 44(4):472–507.
- Mousseau, Michael. 2013. "The Democratic Peace Unraveled: It's the Economy." *International Studies Quarterly* pp. 1–12.
URL: <http://onlinelibrary.wiley.com/doi/10.1111/isqu.12003/abstract>
- Mueller, John. 2000. "The Banality of Ethnic War." *International Security* 25(1):42–70.
- Muller, Edward N. 1985. "Income Inequality, Regime Repressiveness, and Political Violence." *American Sociological Review* 50(1):47–61.
- Muller, Edward N. and Erich Weede. 1990. "Cross-National Variations in Political Violence: A Rational Action Approach." *Journal of Conflict Resolution* 34(4):624–651.
- Murshed, S. Mansoob and Scott Gates. 2005. "Spatial-Horizontal Inequality and the Maoist Insurgency in Nepal." *Review of Development Economics* 9(1):121–134.
- Nafziger, Wayne E and Juha Auvinen. 2002. "Economic development, inequality, war, and state violence." *World Development* 30(2):153–163.
- Neumayer, Eric. 2004. "Asylum Destination Choice: What Makes Some European Countries More Attractive than Others?" *European Union Politics* 5(2):155–180.
- Nordås, Ragnhild and Nils Petter Gleditsch. 2007. "Climate Change and Conflict." *Political Geography* 26(6):627–638.
- North, Douglass C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Obioha, Emeka E. 2008. "Climate Change, Population Drift and Violent Conflict over Land Resources in North Eastern Nigeria." *Journal of Human Ecology* 23(4):311–324.

BIBLIOGRAPHY

- Oneal, John R. and Bruce M. Russett. 1997. "The Classical Liberals Were Right: Democracy, Interdependence, and Conflict, 1950–85." *International Studies Quarterly* 41(2):267–294.
- O’Neil, Shannon. 2009. "The real war in Mexico: how democracy can defeat the drug cartels." *Foreign Affairs* pp. 63–77.
- Østby, Gudrun. 2008. "Polarization, Horizontal Inequalities and Violent Civil Conflict." *Journal of Peace Research* 45(2):143–162.
- Petterson, Thérèse. 2012. "UCDP Non-State Conflict Codebook version 2.4-2012." . Department of Peace and Conflict Research, Uppsala University.
- PGDM. 2013. "The Pro-Government Militias Database (PGDM) 1.0-2013." .
URL: www.sowi.uni-mannheim.de/militias/
- Plumper, Thomas and Eric Neumayer. 2010. "The Level of Democracy during Interregnum Periods: Recoding the polity2 Score." *Political Analysis* 18(2):206–226.
- Posen, Barry R. 1993. "The security dilemma and ethnic conflict." *Survival* 35(1):27–47.
- PRG. 2010. "International Country Risk Guide Methodology." Political Risk Group.
URL: <http://www.prsgroup.com/PDFS/icrgmethodology.pdf>
- Przeworski, A. 2005. "Democracy as an equilibrium." *Public Choice* 123(3-4):253–273.
- Przeworski, Adam, Michael Alvarez, José Antonio Cheibub and Fernando Limongi. 1996. "What Makes Democracies Endure?" *Journal of Democracy* 7:39–55.
- Przeworski, Adam, Michael E. Alvarez, José Antonio Cheibub and Fernando Limongi. 2000. *Democracy and Development. Political Institutions and Well-Being in the World, 1950–1990*. Cambridge: Cambridge University Press.
- Raleigh, Clionadh. 2010. "Political Mariginalization, Climate Change and Conflict in African Sahel States." *International Studies Review* 12(1):69–86.
- Raleigh, Clionadh and Håvard Hegre. 2009. "Population, Size, and Civil War. A Geographically Disaggregated Analysis." *Political Geography* 28(4):224–238.
- Reuveny, Rafael. 2007. "Climate change-induced migration and violent conflict." *Political Geography* 26(6):656–673.
- Reynal-Querol, Marta. 2002. "Political Systems, Stability and Civil Wars." *Defence and Peace Economics* 13(6):465–483.

- Ross, Michael. 2004a. "What Do We Know About Natural Resources and Civil War." *Journal of Peace Research* 41(3):337–356.
- Ross, Michael L. 2004b. "How Does Natural Resource Wealth Influence Civil War? Evidence from 13 Cases." *International Organization* 58(1):35–67.
- Rudolfson, Ida. 2013. "State Capacity, Inequality and Inter-group Violence in Sub-Saharan Africa." University of Oslo. Masters thesis.
URL: <https://www.duo.uio.no/handle/10852/36972>
- Russett, Bruce and John Oneal. 2001. *Triangulating peace: Democracy, interdependence, and international organizations*. London, New York: W.W. Norton.
- Russett, Bruce M., Christopher Layne, David E. Spiro and Michael W. Doyle. 1995. "Correspondence: The Democratic Peace." *International Security* 19(4):164–184. file:///R:
- Sambanis, Nicholas. 2004a. "Using Case Studies to Expand Economic Models of Civil War." *Perspectives on Politics* 2(2):259–279.
- Sambanis, Nicholas. 2004b. "What Is Civil War? Conceptual and Empirical Complexities of an Operational Definition." *Journal of Conflict Resolution* 48(6):814–858.
- Schock, Kurt. 1996. "A Conjunctural Model of Political Conflict: The Impact of Political Opportunities on the Relationship between Economic Inequality and Violent Political Outcome." 40(1):98–133.
- Schrodt, Philip A. 2010. "Seven Deadly Sins of Contemporary Quantitative Political Analysis." *American Political Science Association 2010 Annual Meeting*.
URL: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1661045
- Skocpol, Theda. 1979. *States and Social Revolutions*. Cambridge: Cambridge University Press.
- Stewart, Frances. 2000. "Crisis Prevention: Tackling Horizontal Inequalities." *Oxford Development Studies* 28(3):245–262.
- Stewart, Frances. 2008a. "Horizontal inequalities and conflict: An introduction and some hypotheses." *Horizontal inequalities and conflict: understanding group violence in multi-ethnic societies* pp. 3–24.
- Stewart, Frances, ed. 2008b. *Horizontal Inequalities and Conflict Understanding Group Violence in Multiethnic Societies*. Basingstoke: Palgrave Macmillan.

BIBLIOGRAPHY

- Strand, Håvard, Håvard Hegre, Scott Gates and Marianne Dahl. 2012. "Why Waves? Global Patterns of Democratization, 1820–2008." Typescript, PRIO.
- Strong, Simon. 1992. *Shining path: Terror and revolution in Peru*. Times Books.
- Sundberg, Ralph, Kristine Eck and Joakim Kreutz. 2012. "Introducing the UCDP Non-State Conflict Dataset." *Journal of Peace Research* 49(2):351–362.
- Szeftel, Morris. 2000. "Clientelism, corruption & catastrophe." *Review of African Political Economy* 27(85):427–441.
- Tadjoeddin, Mohammed Z. and M. S. Murshed. 2007. "Socio-Economic Determinants of Everyday Violence in Indonesia: An Empirical Investigation of Javanese Districts, 1994–2003." *Journal of Peace Research* 44(6):689–709.
- Tajfel, Henri and John C Turner. 1979. "An integrative theory of intergroup conflict." *The social psychology of intergroup relations* 33:47.
- Tajima, Yuhki. 2013. "The Institutional Basis of Intercommunal Order: Evidence from Indonesia's Democratic Transition." *American Journal of Political Science* 57(1):104–119.
- Theisen, Ole Magnus. 2008. "Blood and Soil? Resource Scarcity and Internal Armed Conflict Revisited." *Journal of Peace Research* 45(6):801–818.
- Theisen, Ole Magnus, Helge Holtermann and Halvard Buhaug. 2011. "Climate wars? Assessing the claim that drought breeds conflict."
- Themnér, Lotta and Peter Wallensteen. 2013. "Armed Conflicts, 1946–2012." *Journal of Peace Research* 50(4):509–521.
- Tilly, Charles. 1978. *From Mobilization to Revolution*. Reading, MA: Addison-Wesley.
- Tilly, Charles. 2003. *The Politics of Collective Violence*. Cambridge: Cambridge University Press.
- Toungara, Jeanne Maddox. 2001. "Ethnicity and political crisis in Côte d'Ivoire." *Journal of Democracy* 12(3):63–72.
- Turner, Matthew D., Augustine A. Ayantunde, Kristen P. Patterson and E. Daniel Patterson. 2011. "Livelihood Transitions and the Changing Nature of Farmer–Herder Conflict in Sahelian West Africa." *Journal of Development Studies* 47(2):183–206.

- UCDP. 2014. "UCDP Conflict Encyclopedia." Uppsala Conflict Data Program.
URL: *www.ucdp.uu.se/database*
- Urdal, Henrik. 2008. "Population, Resources, and Political Violence A Subnational Study of India, 1956–2002." *Journal of Conflict Resolution* 52(4):590–617.
- Van Klinken, Gerry. 2007a. *Communal Violence and Democratization in Indonesia*. Abingdon: Routledge.
- Van Klinken, Gerry. 2007b. *Communal violence and democratization in Indonesia: Small town wars*. Vol. 6 Routledge.
- Vanhanen, Tatu. 1990. *The Process of Democratization. A Comparative Study of 147 States, 1980–88*. New York: Crane Russak.
- Vanhanen, Tatu. 2000. "A New Dataset for Measuring Democracy, 1810-1998." *Journal of Peace Research* 37(2):251–265.
- Vreeland, James Raymond. 2008. "The Effect of Political Regime on Civil War: Unpacking Anocracy." *Journal of Conflict Resolution* 52(3):401–425.
- Wang, Peiming, Martin L Puterman, Iain Cockburn and Nhu Le. 1996. "Mixed Poisson regression models with covariate dependent rates." *Biometrics* 52(2):381–400.
- Ward, Michael D., Brian D. Greenhill and Kristin M. Bakke. 2010. "The Perils of Policy by p-value: Predicting civil conflicts." *Journal of Peace Research* 47(4):363–375.
- Watch, Human Rights. 2002. "We Have No Orders To Save You; State Participant and Complicity in the Communal Violence in Gujarat." Human Rights Watch Report.
- Weber, Max. [1918]1946. *From Max Weber: Essays in Sociology*. Oxford: Oxford University Press.
- Weinstein, Jeremy M. 2007. *Inside rebellion: the politics of insurgent violence*. Cambridge studies in comparative politics Cambridge and New York: Cambridge University Press.
- Welzel, Christian and Ronald Inglehart. 2006. "Emancipative Values and Democracy: Response to Hadenius and Teorell." *Studies in Comparative International Development* 41(3):74–94.
- White, Halbert. 1980. "A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity." *Econometrica: Journal of the Econometric Society* pp. 817–838.

BIBLIOGRAPHY

- Wilkinson, Steven I. 2004. *Votes and Violence: Electoral Competition and Ethnic Riots in India*. Cambridge University Press.
- Wimmer, Andreas. 1997. "Who Owns the State? Understanding Ethnic Conflict in Post-Colonial Societies." *Nations and Nationalism* 3(4):631–666.
- Wimmer, Andreas. 2002. *Nationalist exclusion and ethnic conflict: shadows of modernity*. Cambridge University Press.
- Zeileis, Achim. 2004. "Econometric Computing with HC and HAC Covariance Matrix Estimators." *Journal of Statistical Software* 11(10):1–17.
URL: <http://www.jstatsoft.org/v11/i10>
- Zeileis, Achim. 2006. "Object-oriented Computation of Sandwich Estimators." *Journal of Statistical Software* 16(9):1–16.
URL: <http://www.jstatsoft.org/v16/i09>

Appendices

Appendix A

Additional Statistics

Table A.1 provides information about the 12 duplicated observations due to multiple state locations.

Table A.1: Duplicated observations

Side A	Side B	Statenames	Year
Hells Angels	Rock Machine	Canada, Mexico	1995
Peulh	Touareg	Mali, Niger	1997
Mauretians	Senegalese	Mauretania, Senegal	1989
Liberia Peace Council	National Patriotic Front of Liberia	Liberia, Ivory Coast	1995
Pokot	Turkana	Kenya, Uganda	2006
Pokot	Turkana	Kenya, Uganda	2008
Dassanetch	Turkana	Kenya, Ethiopia	2005
Nyangatom	Turkana	Kenya, Ethiopia	2006
Borana	Gabra	Kenya, Ethiopia	2007
Borana	Degodia	Ethiopia, Kenya	1998
Kurdish Democratic Party	Kurdistan Worker's Party	Iraq, Turkey	1997
Gulf Cartel	Sinaloa Cartel	Mexico, Guatemala	2008

Source: UCDP non-state conflict dataset (Sundberg, Eck and Kreutz 2012)

Table A.2 provides information about the missing values on the explanatory variables.

Table A.2: Missing values on explanatory variables

Variable	NA	N	Share
SIP index	21.00	2993.00	0.01
State Collapse	21.00	2993.00	0.01
Regime Change	21.00	2993.00	0.01
Democratization	21.00	2993.00	0.01
Autocratization	21.00	2993.00	0.01
Bureacratic Quality	21.00	2993.00	0.01
Log GDP per cap	110.00	2904.00	0.04
Log Population total	66.00	2948.00	0.02
Relevant Groups	0.00	3014.00	0.00
Peace Years	0.00	3014.00	0.00

Source: Strand et al. (2012); Heston and Aten (2012); Hegre and Nygård (2014); GROWup (2014)

Note: Share NA is based on a total of 3014 observations

APPENDIX A. ADDITIONAL STATISTICS

Table A.3: States included in analysis

Afghanistan	Albania	Algeria
Angola	Argentina	Armenia
Australia	Austria	Azerbaijan
Bahrain	Bangladesh	Belarus
Belgium	Benin	Bhutan
Bolivia	Botswana	Brazil
Bulgaria	Burkina Faso	Burundi
Cambodia	Cameroon	Canada
Central African Republic	Chad	Chile
China	Colombia	Congo, Rep. Of
Costa Rica	Cote d'Ivoire	Croatia
Cuba	Cyprus	Czech Republic
Democratic Republic of Congo	Denmark	Djibouti
Dominican Republic	Ecuador	Egypt
El Salvador	Eritrea	Estonia
Ethiopia	Fiji	Finland
France	Gabon	Gambia
Georgia	Germany	Ghana
Greece	Guatemala	Guinea
Guinea-Bissau	Guyana	Haiti
Honduras	Hungary	India
Indonesia	Iran	Iraq
Ireland	Israel	Italy
Jamaica	Japan	Jordan
Kazakhstan	Kenya	Korea Republic of
Kuwait	Kyrgyzstan	Laos
Latvia	Lebanon	Lesotho
Liberia	Libya	Lithuania
Macedonia	Madagascar	Malawi
Malaysia	Mali	Mauritania
Mexico	Moldova	Mongolia
Morocco	Mozambique	Namibia
Nepal	Netherlands	New Zealand
Nicaragua	Niger	Nigeria
Norway	Oman	Pakistan
Panama	Papua New Guinea	Paraguay
Peru	Philippines	Poland
Portugal	Romania	Russia
Rwanda	Saudi Arabia	Senegal
Serbia	Sierra Leone	Slovak Republic
Slovenia	Somalia	South Africa
Spain	Sri Lanka	Sudan
Swaziland	Sweden	Switzerland
Syria	Taiwan	Tajikistan
Tanzania	Thailand	Togo
Trinidad Tobago	Tunisia	Turkey
Turkmenistan	Uganda	Ukraine
United Arab Emirates	United Kingdom	United States
Uruguay	Uzbekistan	Venezuela
Vietnam	Yemen	Zambia
Zimbabwe		

Table A.4: Correlation matrix - explanatory variables

	BQ	SC	RC	Auto.	Demo	BQ*SC	BQ*RC	BQ*Auto.	BQ*Demo.	Rep.Inst.	Pop.	GDP	Rel.G.
BQ	1.00												
SC	-0.27	1.00											
RC	-0.17	0.74	1.00										
Auto.	-0.12	0.49	0.57	1.00									
Demo.	-0.11	0.53	0.80	-0.04	1.00								
BQ*SC	0.38	-0.64	-0.28	-0.28	-0.13	1.00							
BQ*RC	0.28	-0.36	-0.52	-0.40	-0.34	0.58	1.00						
BQ*Auto	0.18	-0.32	-0.36	-0.64	0.03	0.47	0.63	1.00					
BQ*Demo	0.21	-0.20	-0.37	0.02	-0.47	0.37	0.77	-0.01	1.00				
Rep.Inst.	0.02	-0.09	0.01	0.00	0.01	0.03	-0.00	-0.00	-0.00	1.00			
Pop.	0.09	-0.02	-0.02	-0.02	-0.02	0.04	0.05	0.01	0.06	-0.00	1.00		
GDP	0.77	-0.25	-0.17	-0.12	-0.11	0.30	0.20	0.12	0.16	0.03	0.01	1.00	
Rel.G.	-0.09	0.03	0.02	-0.01	0.03	0.02	0.03	0.00	0.04	0.01	0.45	-0.09	1.00

Interaction terms are typeset in bold

Abbreviations: BQ= Bureaucratic Quality, SC=State Collapse, RC= Regime Change, Auto=Autocratization, Demo=Democratization, Rep.Inst.= Representative Institutions, Pop=Population (ln), GDP= GDP per capita (ln), Rel.G.=Relevant Groups

APPENDIX A. ADDITIONAL STATISTICS

Table A.5: Variance inflation factor test

	Mod 4	Mod 5	Mod 6
Rep. Inst.	1.37	1.32	1.68
Bur. Qual.	2.34	1.95	2.07
State Collapse	2.50		
Bur. Qual. * State Collapse	3.24		
Regime Change		1.50	
Bur. Qual. * Regime Change		1.67	
Autocratization			2.05
Bur. Qual * Autocratization			2.13
Democratization			1.20
Bur. Qual * Democratization			1.26
Population (ln)	1.80	1.76	1.81
GDP per cap (ln)	1.72	1.61	1.67
Relevant Groups	1.61	1.59	1.61
Peace Years	26.82	26.83	27.02
Peace Years ²	159.11	159.64	160.68
Peace Years ³	71.60	71.88	72.34

Figure A.1: Occurrences of non-state conflicts by state collapse

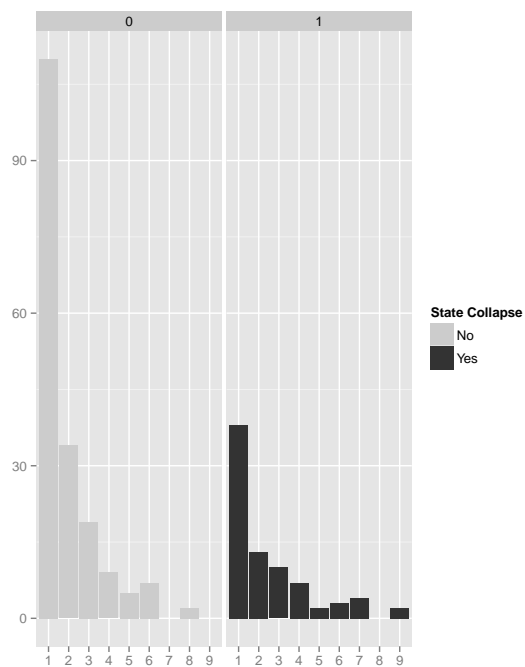


Figure A.2: Occurrences of non-state conflicts by regime change

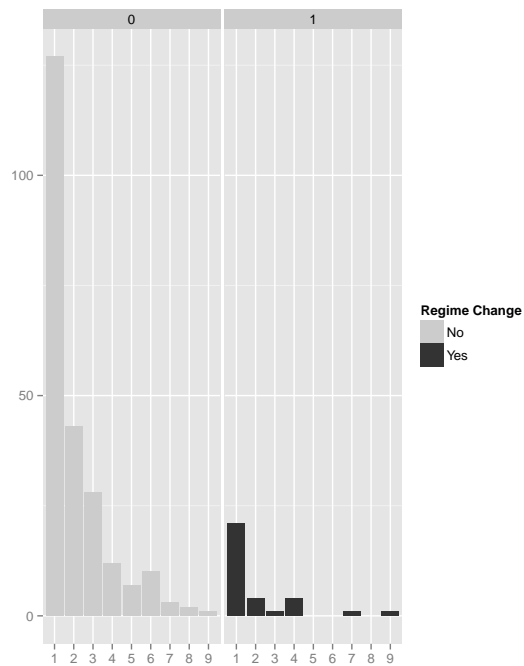


Figure A.3: Occurrences of non-state conflicts by democratization

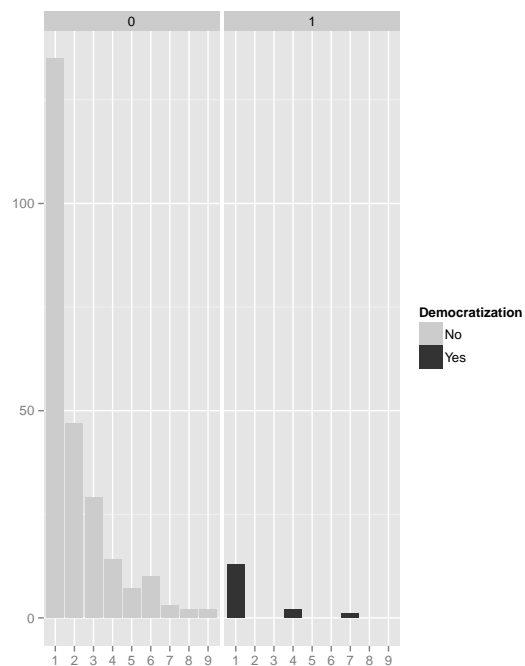
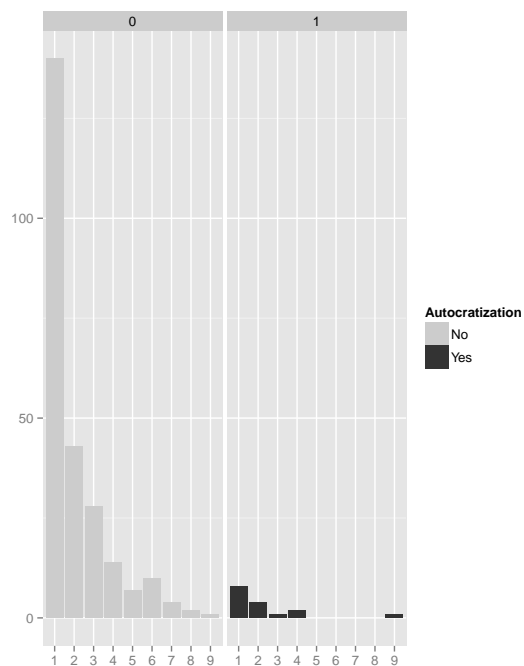


Figure A.4: Occurrences of non-state conflicts by autocratization



Appendix B

Model Robustness

Table B.1: Basemodels: poisson and negative binomial

	Poisson	Neg. bin.
(Intercept)	0.67 (0.42)	0.07 (0.62)
Population (ln)	0.33*** (0.04)	0.40*** (0.06)
GDP per cap (ln)	-0.54*** (0.04)	-0.56*** (0.06)
Relevant Groups	-0.01 (0.01)	-0.01 (0.01)
Peace years	-1.00*** (0.08)	-0.95*** (0.10)
Peace years ²	0.10*** (0.02)	0.09*** (0.02)
Peace years ³	-3.49*** (0.80)	-3.09*** (0.85)
Theta θ		0.65*** (0.09)
N	2904	2904
AIC	2045.18	1857.72
BIC	2212.44	2048.88
$\log L$	-994.59	-896.86

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$;

*** $p < .001$

Table B.2: Results from Model 1 with robust standard errors

	Estimate	Robust SE	Pr(> z)	LL	UL
(Intercept)	-2.48	0.85	0.00	-4.14	-0.82
Rep. Inst.	0.02	0.24	0.93	-0.45	0.50
Bur. Qual.	-0.28	0.12	0.02	-0.52	-0.04
State Collapse	0.61	0.17	0.00	0.27	0.95
Population (ln)	0.48	0.06	0.00	0.36	0.61
GDP per cap (ln)	-0.38	0.09	0.00	-0.55	-0.20
Rel. Gropus	-0.01	0.01	0.51	-0.03	0.02
Peace Years	-0.91	0.11	0.00	-1.13	-0.69
Peace Years ²	0.09	0.02	0.00	0.05	0.13
Peace Years ³	-3.04	0.93	0.00	-4.86	-1.21
<i>N</i>	2904				
AIC	1834.19				
BIC	2120.93				
log <i>L</i>	-869.09				

Table B.3: Results from Model 2 with robust standard errors

	Estimate	Robust SE	Pr(> z)	LL	UL
(Intercept)	-1.92	0.79	0.02	-3.47	-0.36
Rep. Inst.	0.00	0.23	0.98	-0.45	0.46
Bur. Qual.	-0.36	0.13	0.00	-0.61	-0.12
Regime Change	0.06	0.20	0.76	-0.32	0.44
Population (ln)	0.45	0.07	0.00	0.32	0.59
GDP per cap (ln)	-0.39	0.09	0.00	-0.56	-0.22
Rel. Groups	-0.01	0.01	0.59	-0.03	0.02
Peace Years	-0.93	0.11	0.00	-1.15	-0.71
Peace Years ²	0.09	0.02	0.00	0.05	0.13
Peace Years ³	-3.09	0.94	0.00	-4.92	-1.25
<i>N</i>	2904				
AIC	1848.68				
BIC	2111.53				
log <i>L</i>	-880.34				

APPENDIX B. MODEL ROBUSTNESS

Table B.4: Results from Model 3 with robust standard errors

	Estimate	Robust SE	Pr(> z)	LL	UL
(Intercept)	-1.85	0.80	0.02	-3.42	-0.28
Rep. Inst.	0.08	0.24	0.75	-0.39	0.54
Bur. Qual.	-0.36	0.13	0.00	-0.61	-0.11
Autocratization	0.47	0.28	0.10	-0.09	1.02
Democratization	-0.29	0.26	0.27	-0.80	0.22
Population (ln)	0.45	0.07	0.00	0.31	0.58
GDP per cap (ln)	-0.40	0.09	0.00	-0.57	-0.23
Rel. Groups	-0.01	0.01	0.63	-0.03	0.02
Peace Years	-0.94	0.11	0.00	-1.16	-0.71
Peace Years ²	0.09	0.02	0.00	0.05	0.13
Peace Years ³	-3.10	0.94	0.00	-4.94	-1.26
<i>N</i>	2904				
AIC	1846.40				
BIC	2133.14				
log <i>L</i>	-875.20				

Table B.5: Results from Model 4 with robust standard errors

	Estimate	Robust SE	Pr(> z)	LL	UL
(Intercept)	-2.46	0.85	0.00	-4.11	-0.80
Rep. Inst.	0.02	0.24	0.94	-0.46	0.49
Bur. Qual.	-0.23	0.12	0.06	-0.46	0.01
State Collapse	0.43	0.17	0.01	0.09	0.77
Bur. Qual.* State Collapse	-0.20	0.85	0.81	-1.86	1.46
Population (ln)	0.48	0.06	0.00	0.35	0.60
GDP per cap (ln)	-0.37	0.09	0.00	-0.55	-0.20
Rel. Groupus	-0.01	0.01	0.64	-0.03	0.02
Peace Years	-0.90	0.11	0.00	-1.13	-0.68
Peace Years ²	0.09	0.02	0.00	0.05	0.13
Peace Years ³	-3.00	0.93	0.00	-4.82	-1.17
<i>N</i>	2904				
AIC	1834.19				
BIC	2120.93				
log <i>L</i>	-869.09				

Table B.6: Likelihood ratio tests for Mod 1 and Mod 4: Uconditional vs conditional effect of state collapse by bureaucratic quality

Model	Resid. df.	2 x log-lik	df.	Pr.Chi.
Base	2897	-1841.72		
Mod 1	2894	-1812.24	3	0.00
Mod 4	2893	-1810.95	1	0.26

Table B.7: Likelihood ratio tests for Model 2 and Model 4: Uncondition vs conditional effect of state collapse by bureaucratic quality

Model	Resid. df.	2 x log-lik	df.	Pr.Chi.
Base	2897	-1841.72		
Mod 2	2894	-1826.68	3	0.00
Mod 4	2893	-1826.25	1	0.51

Table B.8: Likelihood ratio tests for Model 3 and Model 6: Uncondition vs conditional effect of democratization and autocratization by bureaucratic quality

Model	Resid. df.	2 x log-lik	df.	Pr.Chi.
Base	2897	-1841.72		
Mod 3	2893	-1822.92	4	0.00
Mod 6	2891	-1821.31	2	0.45

Table B.9: Likelihood ratio tests for Model 2 and Model 3: Regime change per se vs direction of change

Model	Resid. df.	2 x log-lik	df.	Pr.Chi.
Base	2897	-1841.72		
Mod 2	2894	-1826.68	3	0.00
Mod 3	2893	-1822.92	1	0.05

APPENDIX B. MODEL ROBUSTNESS

Table B.10: Results from hurdle estimations

Count Estimates						
	Model 1		Model 1		Model 1	
(Intercept)	-1.15	(1.40)	-1.18	(1.29)	-1.09	(1.26)
Rep. Inst	-0.61 [†]	(0.36)	-0.59 [†]	(0.36)	-0.59	(0.36)
Bur. Qual.	-0.27 [†]	(0.15)	-0.28 [†]	(0.14)	-0.28 [†]	(0.14)
State Collapse	0.02	(0.22)				
Regime Change			-0.09	(0.26)		
Democratization					-0.25	(0.39)
Autocratization					0.04	(0.34)
Population (ln)	0.30**	(0.10)	0.30**	(0.10)	0.30**	(0.09)
GDP per cap (ln)	-0.18	(0.11)	-0.18	(0.11)	-0.18 [†]	(0.11)
Rel. Groups	-0.03	(0.02)	-0.03	(0.02)	-0.03 [†]	(0.02)
Peace Years	-0.62 [†]	(0.35)	-0.63 [†]	(0.33)	-0.63*	(0.31)
Peace Years ²	0.12	(0.16)	0.13	(0.14)	0.13	(0.14)
Peace Years ³	-10.24	(15.04)	-11.60	(13.93)	-11.40	(13.49)
Theta θ	0.49	(0.53)	0.51***	(0.04)	0.52	(0.01)
Logit Estimates						
	Model 1		Model 1		Model 1	
(Intercept)	-2.10*	(0.99)	-1.66 [†]	(0.97)	-1.64 [†]	(0.97)
Rep. Inst.	0.40	(0.28)	0.36	(0.27)	0.43	(0.28)
Bur. Qual.	-0.19	(0.12)	-0.28*	(0.12)	-0.29*	(0.12)
State Collapse	0.86***	(0.20)				
Regime Change			0.18	(0.24)		
Democratization					-0.134	(0.32)
Autocratization					0.65 [†]	(0.36)
Population (ln)	0.50***	(0.07)	0.47***	(0.07)	0.47***	(0.07)
GDP per cap (ln)	-0.48***	(0.09)	-0.49***	(0.09)	-0.49***	(0.09)
Rel. Groups	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)
Peace Years	-1.05***	(0.12)	-1.05***	(0.12)	-1.05***	(0.12)
Peace Years ²	0.11***	(0.02)	0.11***	(0.02)	0.11***	(0.02)
Peace Years ³	-3.85***	(0.96)	-3.87***	(0.97)	-3.85***	(0.97)
AIC	1817.35		1833.84		1834.98	
Log Likelihood	-887.67		-895.92		-894.4904	
Num. obs.	2904		2904		2904	

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table B.11: Results for unconditional analysis with removal of outliers

	Model 1	Model 2	Model 3
(Intercept)	-3.88*** (0.99)	-3.46*** (0.97)	-3.39*** (0.97)
Rep. Inst.	0.27 (0.27)	0.18 (0.26)	0.28 (0.27)
Bur. Qual.	-0.19 (0.13)	-0.24 [†] (0.13)	-0.24 [†] (0.13)
State Collapse	0.56** (0.19)		
Regime Change		0.37 [†] (0.22)	
Democratization			0.05 (0.29)
Autocratization			0.78** (0.30)
Population (ln)	0.72*** (0.07)	0.71*** (0.07)	0.70*** (0.07)
GDP per cap (ln)	-0.59*** (0.10)	-0.61*** (0.09)	-0.62*** (0.09)
Rel. Groups	-0.05** (0.02)	-0.05** (0.02)	-0.05** (0.02)
Peace Years	-0.71*** (0.11)	-0.73*** (0.11)	-0.73*** (0.11)
Peace Years ²	0.07*** (0.02)	0.07*** (0.02)	0.07*** (0.02)
Peace Years ³	-2.45** (0.88)	-2.52** (0.88)	-2.51** (0.88)
θ	1.01*** (0.24)	1.01*** (0.25)	1.01*** (0.24)
N	2764	2764	2764
AIC	1217.92	1223.16	1222.03
BIC	1478.60	1483.83	1506.40
log L	-564.96	-567.58	-563.02

Negative binomial regression

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

APPENDIX B. MODEL ROBUSTNESS

Table B.12: Results for conditional analysis with removal of outliers

	Model 1	Model 2	Model 3
(Intercept)	−3.86*** (0.99)	−3.40*** (0.98)	−3.32*** (0.98)
Rep. Inst.	0.27 (0.27)	0.18 (0.27)	0.28 (0.27)
Bur. Qual.	−0.16 (0.14)	−0.22 (0.14)	−0.23 (0.14)
State Collapse	0.41 (0.29)		
Bur. Qual. * State Collapse	−0.17 (0.24)		
Regime Change		0.29 (0.29)	
Bur. Qual. * Regime Change		−0.12 (0.27)	
Democratization			0.16 (0.34)
Autocratization			0.52 (0.50)
Bur. Qual. * Demo.			0.17 (0.35)
Bur. Qual. * Auto.			−0.27 (0.43)
Population (ln)	0.73*** (0.07)	0.70*** (0.07)	0.70*** (0.07)
GDP per cap (ln)	−0.59*** (0.10)	−0.61*** (0.09)	−0.62*** (0.10)
Rel. Groups	−0.05** (0.02)	−0.05** (0.02)	−0.05** (0.02)
Peace Years	−0.70*** (0.11)	−0.73*** (0.11)	−0.72*** (0.11)
Peace Years ²	0.07*** (0.02)	0.07*** (0.02)	0.07*** (0.02)
Peace Years ³	−2.42** (0.88)	−2.52** (0.88)	−2.48** (0.88)
θ	1.01*** (0.24)	1.01*** (0.25)	1.01*** (0.24)
N	2764	2764	2764
AIC	1219.44	1224.98	1225.36
BIC	1503.81	1509.36	1557.13
log L	−561.72	−564.49	−556.68

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix C

Alternative Specifications

Table C.1: Results with ACLP-index as indicator of representative institutions and regime change

	Model 1	Model 2	Model 3	Model 4
(Intercept)	-2.55** (0.81)	-2.55** (0.81)	-2.56** (0.81)	-2.65** (0.81)
Rep. Inst.	-0.45** (0.16)	-0.45** (0.17)	-0.45** (0.16)	-0.45** (0.17)
Bur. Qual.	-0.32*** (0.10)	-0.32*** (0.10)	-0.32*** (0.10)	-0.32*** (0.10)
Regime Change	0.18 (0.40)		0.23 (0.46)	
Bur. Qual.* Regime Change			0.11 (0.52)	
Democratization		0.16 (0.49)		0.26 (0.52)
Bur. Qual.* Demo.				0.25 (0.66)
Autocratization		0.25 (0.70)		-2.00 (1.70)
Bur. Qual.* Auto.				-2.14 [†] (1.19)
Population (ln)	0.51*** (0.06)	0.51*** (0.06)	0.51*** (0.06)	0.51*** (0.06)
GDP per cap (ln)	-0.36*** (0.07)	-0.36*** (0.07)	-0.35*** (0.07)	-0.35*** (0.07)
Rel. Groups	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Peace Years	-0.92*** (0.10)	-0.92*** (0.10)	-0.92*** (0.10)	-0.91*** (0.10)
Peace Years ²	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Peace Years ³	-3.07*** (0.85)	-3.06*** (0.85)	-3.07*** (0.85)	-2.99*** (0.84)
Theta θ	0.74*** (0.11)	0.74*** (0.11)	0.74*** (0.11)	0.74*** (0.11)
N	2930	2930	2930	2930
AIC	1843.32	1845.31	1845.28	1845.98
BIC	2106.56	2132.48	2132.45	2181.02
log L	-877.66	-874.65	-874.64	-866.99

Negative binomial regression

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

APPENDIX C. ALTERNATIVE SPECIFICATIONS

Table C.2: Results with decay function of regime change, non state conflicts 1989-2008

	Model 1	Model 2	Model 3
(Intercept)	-2.51** (0.83)	-1.89* (0.81)	-1.81* (0.81)
Rep. Inst.	-0.01 (0.23)	0.01 (0.23)	0.11 (0.23)
Bur. Qual	-0.29** (0.10)	-0.36*** (0.10)	-0.36*** (0.10)
State Collapse _{ht}	0.54** (0.17)		
Regime Change _{ht}		-0.03 (0.20)	
Democratization _{ht}			-0.40 (0.26)
Autocratization _{ht}			0.30 (0.27)
Population (ln)	0.48*** (0.06)	0.45*** (0.06)	0.45*** (0.06)
GDP per cap (ln)	-0.37*** (0.07)	-0.40*** (0.07)	-0.41*** (0.07)
Rel. Groups	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Peace Years	-0.92*** (0.10)	-0.93*** (0.10)	-0.93*** (0.10)
Peace Years ²	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Peace Years ³	-3.06*** (0.85)	-3.07*** (0.85)	-3.05*** (0.85)
Theta θ	0.72*** (0.11)	0.70*** (0.11)	0.70*** (0.11)
N	2904	2904	2904
AIC	1838.30	1848.75	1847.38
BIC	2101.15	2111.60	2134.12
$\log L$	-875.15	-880.37	-875.69

Negative binomial regression

Standard errors in parentheses

Subscript_{ht} indicates a halftime decay function

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table C.3: Result from African sub-Sample

	Model 1	Model 2	Model 3
(Intercept)	-7.05*** (1.22)	-6.08*** (1.19)	-5.99*** (1.19)
Rep. Inst.	0.05 (0.31)	0.00 (0.31)	0.10 (0.32)
Bur. Qual	-0.29* (0.13)	-0.41** (0.12)	-0.41** (0.12)
State Collapse	0.74*** (0.18)		
Regime Change		0.10 (0.24)	
Democratization			-0.27 (0.35)
Autocratization			0.43 (0.31)
Population (ln)	0.74*** (0.09)	0.73*** (0.09)	0.72*** (0.09)
GDP per cap (ln)	-0.05 (0.12)	-0.13 (0.12)	-0.14 (0.12)
Relevant Groups	-0.01 (0.02)	-0.03 (0.02)	-0.03 (0.02)
Peace Years	-0.85*** (0.14)	-0.93*** (0.14)	-0.93*** (0.14)
Peace Years ²	0.08** (0.03)	0.09** (0.03)	0.09** (0.03)
Peace Years ³	-2.86* (1.43)	-3.29* (1.48)	-3.28* (1.49)
Theta θ	1.11*** (0.21)	1.04*** (0.20)	1.04*** (0.20)
N	913	913	913
AIC	1015.20	1028.52	1028.29
BIC	1227.14	1240.45	1259.50
$\log L$	-463.60	-470.26	-466.15

Negative binomial regression

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

APPENDIX C. ALTERNATIVE SPECIFICATIONS

Table C.4: Result from Asian and Middle East sub-sample

	Model 1	Model 2	Model 3
(Intercept)	-4.46* (1.98)	-3.02 (1.92)	-3.01 (1.93)
Rep. Inst.	1.01* (0.41)	1.04* (0.41)	1.08** (0.42)
Bur. Qual.	-0.81*** (0.21)	-0.88*** (0.22)	-0.88*** (0.22)
State Collapse	0.79** (0.30)		
Regime Change		-0.24 (0.48)	
Democratization			-0.54 (0.61)
Autocratization			0.33 (0.75)
Population (ln)	0.30** (0.11)	0.20* (0.10)	0.20* (0.10)
GDP per cap (ln)	-0.04 (0.16)	-0.08 (0.16)	-0.08 (0.16)
Rel. Groups	0.01 (0.02)	0.02 (0.02)	0.02 (0.02)
Peace Years	-0.72*** (0.17)	-0.73*** (0.17)	-0.73*** (0.17)
Peace Years ²	0.07* (0.03)	0.07* (0.03)	0.07* (0.03)
Peace Years ³	-2.54 [†] (1.37)	-2.39 [†] (1.36)	-2.39 [†] (1.36)
Theta θ	0.83** (0.30)	0.76** (0.27)	0.77** (0.27)
N	816	816	816
AIC	508.87	514.84	516.05
BIC	715.86	721.84	741.86
$\log L$	-210.43	-213.42	-210.03

Negative binomial regression

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table C.5: Result from rebel sub-sample

	Model 1	Model 2	Model 3
(Intercept)	-6.71*** (1.14)	-5.11*** (1.10)	-5.02*** (1.09)
Rep. Inst.	0.18 (0.30)	0.28 (0.30)	0.34 (0.30)
Bur. Qual	-0.77*** (0.14)	-0.92*** (0.14)	-0.91*** (0.14)
State Collapse	1.17*** (0.19)		
Regime Change		0.14 (0.28)	
Democratization			-0.46 (0.42)
Autocratization			0.69 [†] (0.37)
Population (ln)	0.48*** (0.08)	0.42*** (0.08)	0.41*** (0.08)
GDP per cap (ln)	0.03 (0.09)	-0.07 (0.09)	-0.08 (0.09)
Relevant Groups	-0.01 (0.01)	0.00 (0.01)	0.00 (0.01)
Peace Years	-0.78*** (0.12)	-0.81*** (0.12)	-0.83*** (0.12)
Peace Years ²	0.06** (0.02)	0.06*** (0.02)	0.07*** (0.02)
Peace Years ³	-1.61* (0.80)	-1.63* (0.80)	-1.72* (0.80)
Theat θ	0.86*** (0.23)	0.67*** (0.17)	0.70*** (0.18)
N	2904	2904	2904
AIC	1050.87	1084.87	1082.67
BIC	1313.72	1347.72	1369.41
$\log L$	-481.43	-498.44	-493.33

Negative binomial regression

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

APPENDIX C. ALTERNATIVE SPECIFICATIONS

Table C.6: Results from communal sub-sample

	Model 1	Model 2	Model 3
(Intercept)	−0.28 (1.16)	−0.24 (1.15)	−0.16 (1.16)
Rep. Inst.	−0.27 (0.33)	−0.27 (0.34)	−0.19 (0.34)
Bur. Qual.	0.01 (0.14)	−0.00 (0.14)	−0.00 (0.14)
State Collapse	0.06 (0.23)		
Regime Change		−0.03 (0.29)	
Democratization			−0.31 (0.39)
Autocratization			0.34 (0.40)
Population (ln)	0.65*** (0.09)	0.65*** (0.09)	0.64*** (0.09)
GDP per cap (ln)	−0.91*** (0.11)	−0.92*** (0.11)	−0.93*** (0.11)
Relevant Groups	−0.03 [†] (0.02)	−0.03 [†] (0.02)	−0.03 [†] (0.02)
Peace Years	−0.74*** (0.12)	−0.74*** (0.12)	−0.74*** (0.12)
Peace Years ²	0.05* (0.02)	0.05* (0.02)	0.05* (0.02)
Peace Years ³	−1.01 (0.90)	−1.01 (0.90)	−1.01 (0.90)
Theta θ	0.60*** (0.12)	0.60*** (0.12)	0.60*** (0.12)
N	2904	2904	2904
AIC	1065.84	1065.89	1066.40
BIC	1328.69	1328.74	1353.14
$\log L$	−488.92	−488.94	−485.20

Negative binomial regression

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table C.7: Results from estimations including civil war as control

	Model 1	Model 2	Model 3
(Intercept)	-2.48** (0.83)	-1.89* (0.81)	-1.82* (0.81)
Rep. Inst.	-0.08 (0.23)	-0.10 (0.23)	-0.03 (0.23)
Bur. Qual.	-0.23* (0.10)	-0.32** (0.10)	-0.32** (0.10)
State Collapse	0.64*** (0.16)		
Regime Change		0.12 (0.20)	
Democratization			-0.23 (0.28)
Autocratization			0.51 [†] (0.28)
Population (ln)	0.46*** (0.06)	0.43*** (0.06)	0.43*** (0.06)
GDP per cap (ln)	-0.37*** (0.07)	-0.38*** (0.07)	-0.39*** (0.07)
Relevant Groups	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Civil War _{t-5}	0.55*** (0.14)	0.53*** (0.15)	0.53*** (0.15)
Peace Years	-0.91*** (0.10)	-0.94*** (0.10)	-0.94*** (0.10)
Peace Years ²	0.09*** (0.02)	0.10*** (0.02)	0.10*** (0.02)
Peace Years ³	-3.07*** (0.85)	-3.16*** (0.86)	-3.17*** (0.86)
Theta θ	0.73*** (0.11)	0.71*** (0.11)	0.71*** (0.11)
N	2881	2881	2881
AIC	1820.87	1836.45	1834.80
BIC	2107.23	2122.81	2145.02
log L	-862.43	-870.22	-865.40

Negative binomial regression

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix D

Dataset and Syntax-files

For all my analysis, tables and figures I have used R.

The data used in my analysis and its belonging R-scripts are all made available to the public.¹

Further questions regarding the analysis, tables or figures can be provided upon request.

Contact: hannabugge@gmail.com

¹<https://www.dropbox.com/sh/zlc1v7mtju2x6k2/AAAE4NHN9J7WTfkvn6Ibmy6a>